PIONEER®
The Art of Entertainment

Service Manual

DEX-P1R/UC

ORDER NO.
CRT2206

MULTI-CD CONTROL DSP CD PLAYER WITH RDS/ID-LOGIC TUNER

DEX-P1R UC

MULTI-CD CONTROL DSP HIGH POWER CD PLAYER WITH FM/AM TUNER

DEH-P946 ES

MULTI-CD CONTROL DSP CD PLAYER WITH FM/AM TUNER

DEX-P1 ES

- **See the separate manual CX-680(CRT2216) for the CD mechanism description, disassembly and circuit description.**
- **The CD mechanism employed in this model is one of H1 series.**

CONTENTS

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● **CD Player Service Precautions**

1. For pickup unit(CXX1290) handling, please refer to"Disassembly"(CX-680 Service Manual CRT2216). During replacement, handling precautions shall be taken to prevent an electrostatic discharge(protection by a short pin).
2. During disassembly, be sure to turn the power off since an internal IC might be destroyed when a connector is plugged or unplugged.
3. Please checking the grating after changing the service pickup unit(see page 96).

1. SAFETY INFORMATION

CAUTION

This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer.
Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual.
Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty.
If you are not qualified to perform the repair of this product properly and safely; you should not risk trying to do so and refer the repair to a qualified service technician.

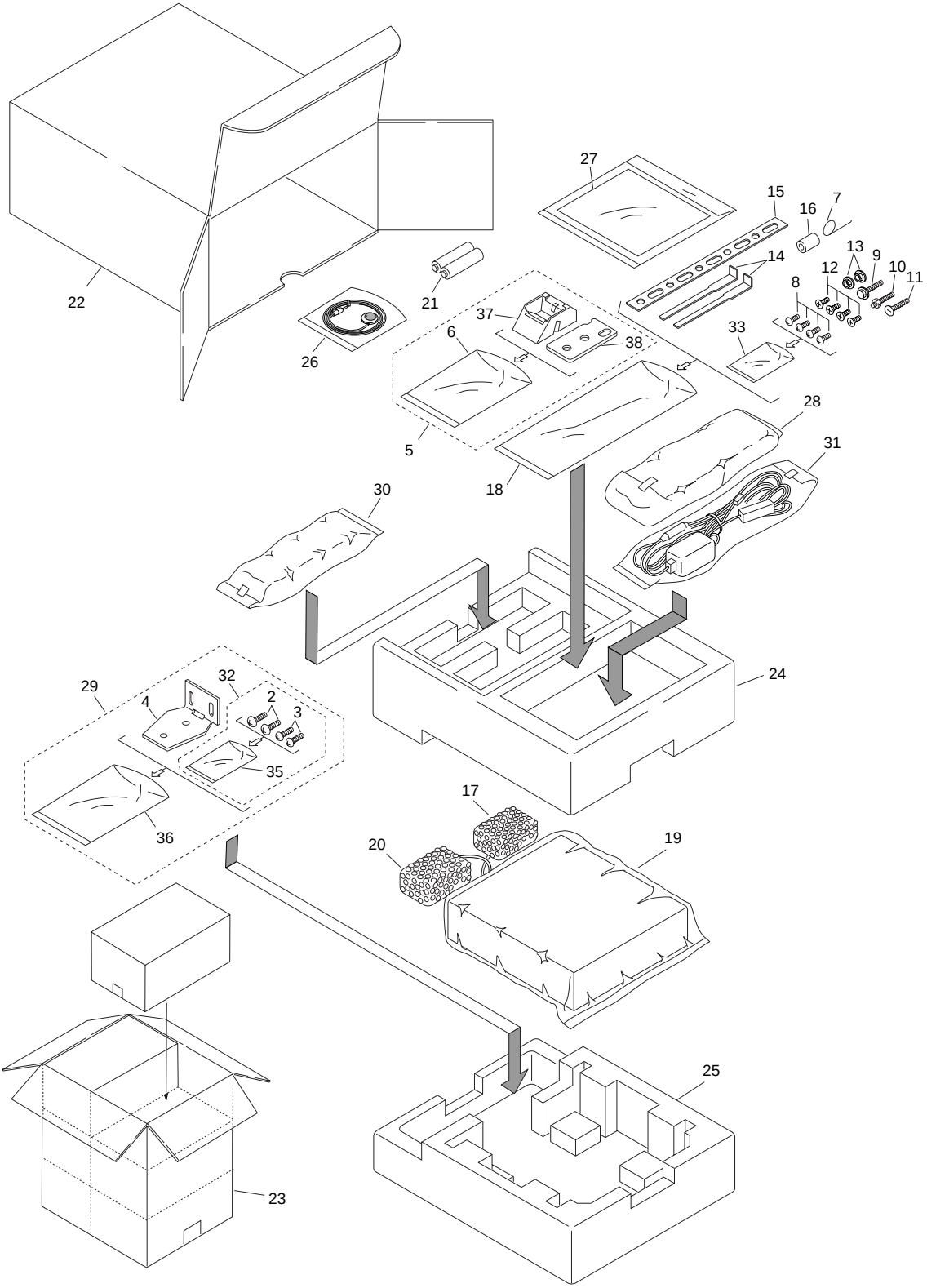
WARNING

Lead in solder used in this product is listed by the California Health and Welfare agency as a known reproductive toxicant which may cause birth defects or other reproductive harm (California Health and Safety Code, Section 25249.5). When servicing or handling circuit boards and other components which contain lead in solder, avoid unprotected skin contact with the solder. Also, when soldering do not inhale any smoke or fumes produced.

2. EXPLODED VIEWS AND PARTS LIST

2.1 PACKING

● **DEX-P1R/UC, DEX-P1/ES**



NOTE:

● Parts marked by "*"are generally unavailable because they are not in our Master Spare Parts List.

● Screws adjacent to ∇ mark on the product are used for disassembly.

● PACKING SECTION PARTS LIST

(1) PARTS LIST

Mark	No.	Description	Part No.
	1	•••••	
	2	Screw	BNC40P120FZK
	3	Screw	BPZ30P100FZK
	4	Bracket	CZN6467
	5	Base Assy	CEA2426
	6	Polyethylene Bag	CZE3188
	7	Spring	CBH-865
	8	Screw	BMZ50P060FMC
	9	Screw	See Contrast table(2)
	10	Screw	CBA1002
	11	Screw	CBA1120
	12	Screw	CMZ50P060FMC
	13	Nut	See Contrast table(2)
	14	Handle	CNC5395
	15	Strap	See Contrast table(2)
	16	Bush	CNV1917
	17	Air Cushioned Bag	CEG1080
*	18	Polyethylene Bag	CEG-158
	19	Polyethylene Bag	See Contrast table(2)
	20	Air Cushioned Bag	CEG1192
	21	Battery	CEX1006
	22	Carton	See Contrast table(2)
	23	Contain Box	See Contrast table(2)
	24	Protector	CHP2032
	25	Protector	CHP2033

Mark	No.	Description	Part No.
	26	Microphone Assy	CPM1022
	27-1	Owner's Manual	See Contrast table(2)
	27-2	Owner's Manual	See Contrast table(2)
	27-3	Installation Manual	See Contrast table(2)
	27-4	Installation Manual	See Contrast table(2)
*	27-5	Caution Card	See Contrast table(2)
*	27-6	Card	CRP1183
	27-7	Polyethylene Bag	CEG1116
*	27-8	Warranty Card	See Contrast table(2)
*	27-9	Card	See Contrast table(2)
*	27-10	Caution Card	See Contrast table(2)
	28	Case Assy	CXA7194
	29	Bracket Assy	CEA2346
	30	Remote Control Assy	See Contrast table(2)
	30-1	Polyethylene Bag	CEG1011
	31	Cord Assy	CDE5655
	32	Screw Assy	CZE3198
*	33	Polyethylene Bag	CEG-127
	34	•••••	
*	35	Polyethylene Bag	CEG-127
*	36	Polyethylene Bag	CZE3201
*	37	Base	CNS5031
*	38	Sheet	CZA3371

● Owner's Manual

Model	Part No.	Language
DEX-P1R/UC	CRB1514	English
DEX-P1/ES	CRD2730	English, Spanish
	CRD2731	Portuguese, Arabic

● Installation Manual

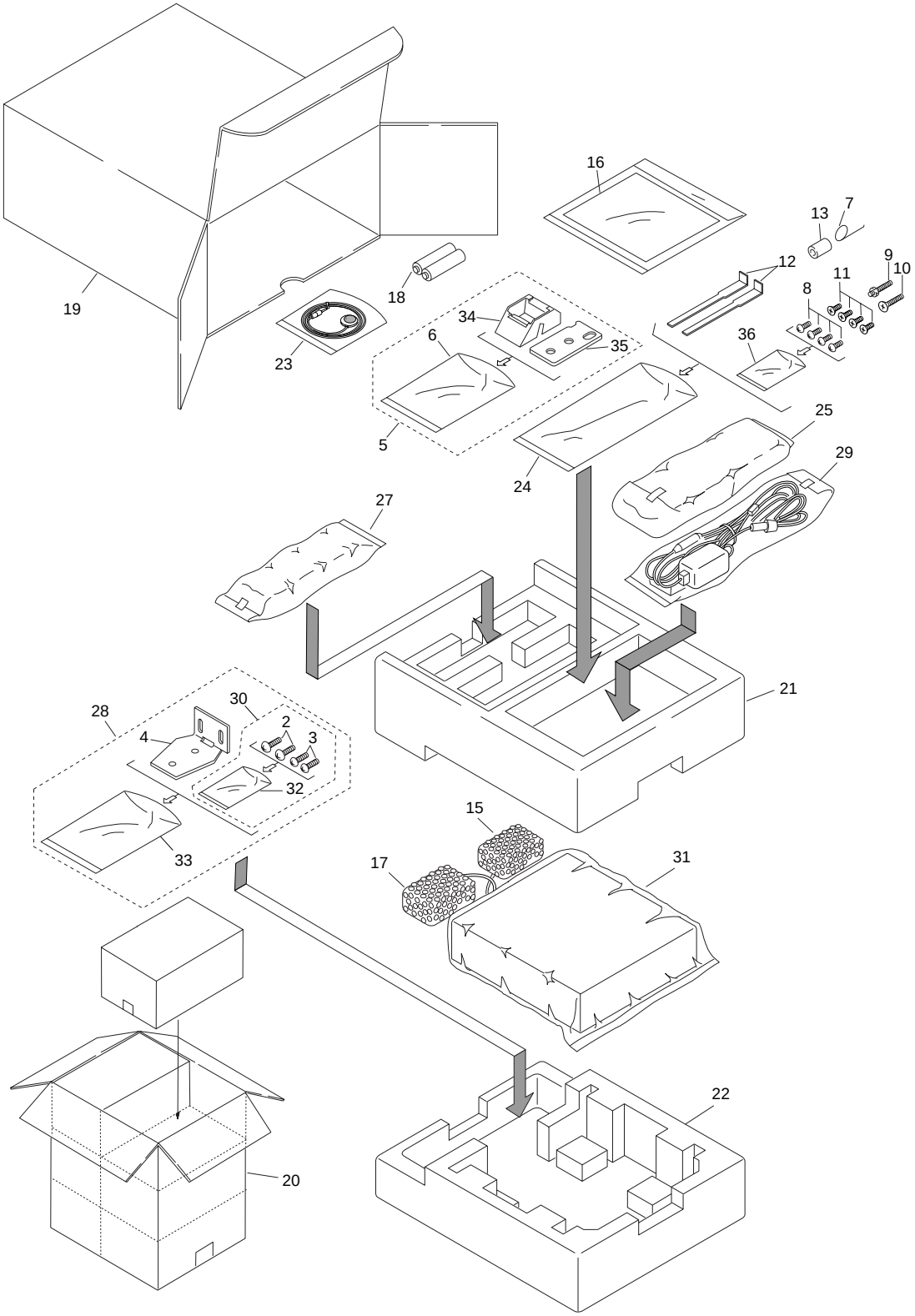
Model	Part No.	Language
DEX-P1R/UC	CRB1515	English
DEX-P1/ES	CRD2660	English, Spanish
	CRD2661	Portuguese, Arabic

(2) CONTRAST TABLE

DEX-P1R/UC and DEX-P1/ES are constructed same except for the following:

Mark No.	Symbol and Description	Part No. DEX-P1R/UC	Part No. DEX-P1/ES
9	Screw	CBA-102	Not used
13	Nut	NF50FMC	Not used
15	Strap	CNF-111	Not used
19	Polyethylene Bag	CEG1185	*CEG1088
22	Carton	CHG3501	CHG3503
23	Contain Box	CHL3501	CHL3503
27-1	Owner's Manual	CRB1514	CRD2730
27-2	Owner's Manual	Not used	CRD2731
27-3	Installation Manual	CRB1515	CRD2660
27-4	Installation Manual	Not used	CRD2661
* 27-5	Caution Card	CRN1049	Not used
* 27-8	Warranty Card	CRY1070	Not used
* 27-9	Card	Not used	CRP1186
*27-10	Caution Card	CRN1049	Not used
30	Remote Control Assy	CXB2758	CXB2764

● **DEH-P946/ES**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● PACKING SECTION PARTS LIST

Mark	No.	Description	Part No.
	1	•••••	
	2	Screw	BNC40P120FZK
	3	Screw	BPZ30P100FZK
	4	Bracket	CZN6467
	5	Base Assy	CEA2426
	6	Polyethylene Bag	CZE3188
	7	Spring	CBH-865
	8	Screw	BMZ50P060FMC
	9	Screw	CBA1002
	10	Screw	CBA1120
	11	Screw	CMZ50P060FMC
	12	Handle	CNC5395
	13	Bush	CNV1917
	14	•••••	
	15	Air Cushioned Bag	CEG1080
	16-1	Polyethylene Bag	CEG1116
	16-2	Owner's Manual	CRD2658
	16-3	Owner's Manual	CRD2659
	16-4	Installation Manual	CRD2660
	16-5	Installation Manual	CRD2661
*	16-6	Card	CRP1183
*	16-7	Card	CRP1186
	17	Air Cushioned Bag	CEG1192
	18	Battery	CEX1006
	19	Carton	CHG3500
	20	Contain Box	CHL3500
	21	Protector	CHP2032
	22	Protector	CHP2033
	23	Microphone Assy	CPM1022
*	24	Polyethylene Bag	CEG-158
	25	Case Assy	CXA7194
	26	•••••	
	27	Remote Control Assy	CXB2655
	27-1	Polyethylene Bag	CEG1011
	28	Bracket Assy	CEA2346
	29	Cord Assy	CDE5656
	30	Screw Assy	CZE3198
*	31	Cover	CEG1088
*	32	Polyethylene Bag	CEG-127
*	33	Polyethylene Bag	CZE3201
*	34	Base	CNS5031
*	35	Sheet	CZA3371
*	36	Polyethylene Bag	CEG-127

● Owner's Manual

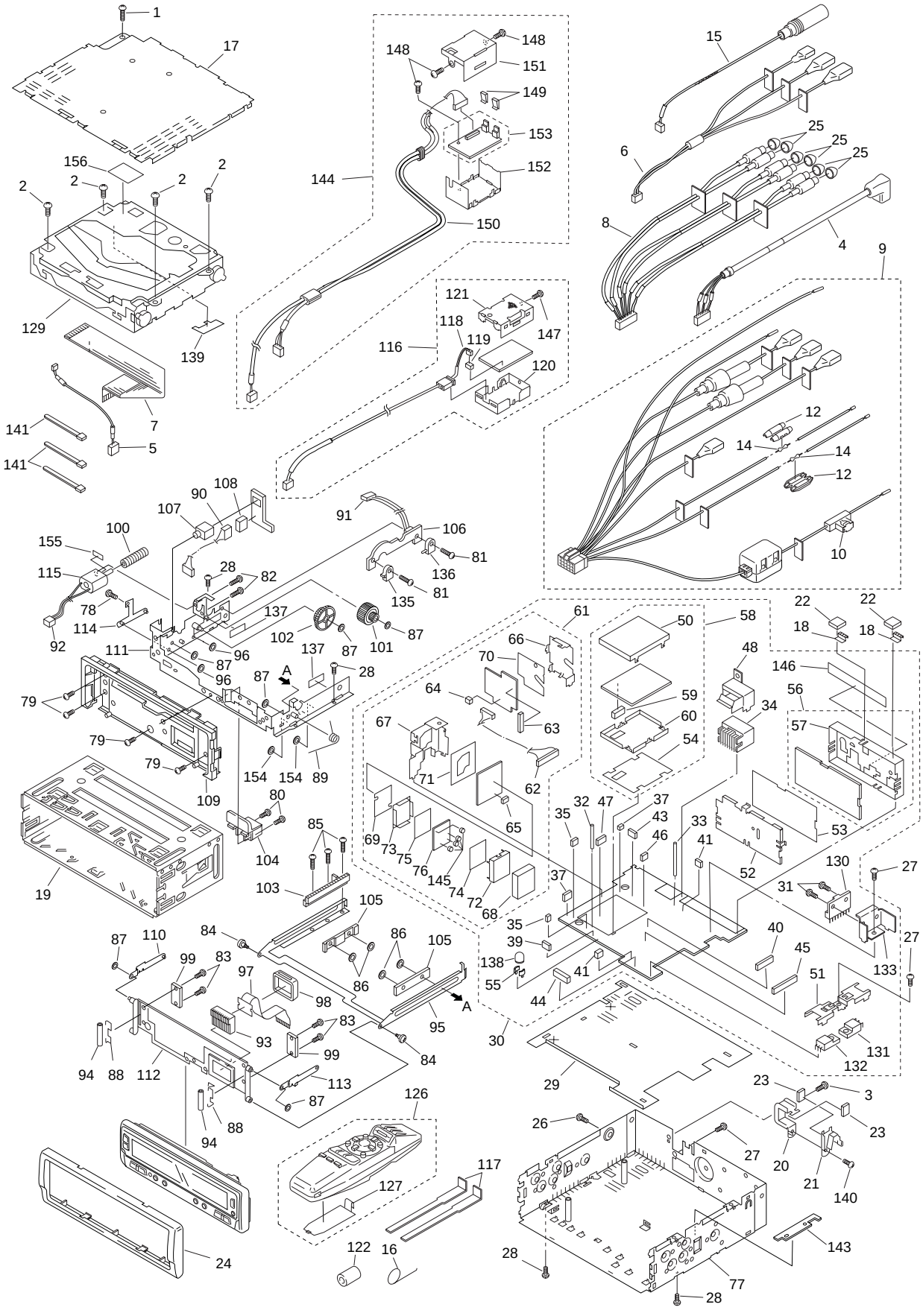
Model	Part No.	Language
DEH-P946/ES	CRD2658	English, Spanish
	CRD2659	Portuguese, Arabic

● Installation Manual

Model	Part No.	Language
DEH-P946/ES	CRD2660	English, Spanish
	CRD2661	Portuguese, Arabic

2.2 EXTERIOR (1)

● DEX-P1R/UC, DEX-P1/ES



● EXTERIOR (1) SECTION PARTS LIST

(1) PARTS LIST

Mark	No.	Description	Part No.
	1	Screw	BMZ30P040FMC
	2	Screw	BSZ26P050FMC
	3	Screw	BSZ30P055FMC
	4	Cord Assy	CDE5785
	5	Cord	CDE5536
	6	Cord Assy	See Contrast table(2)
	7	Connector	CDE5543
	8	Cord Assy	CDE5545
	9	Cord Assy	CDE5655
	10	Fuse	CEK1001
	11	•••••	
	12	Cap	CNS1472
	13	•••••	
	14	Resistor	RS1/2PMF102J
	15	Antenna Cable	CDH1115
	16	Spring	CBH-865
	17	Case	CNB2279
	18	Earth Terminal	CNC7358
	19	Holder	CNC6798
	20	Holder	CNC7566
	21	Holder	CNC7753
	22	Spacer	CNM4913
	23	Cushion	CNM6062
	24	Panel	CNS4553
	25	Cap	CNV2680
	26	Screw	BMZ30P040FMC
	27	Screw	BSZ30P055FMC
	28	Screw	CBA1447
	29	Insulator	CNM5627
	30	Tuner Amp Unit	See Contrast table(2)
	31	Screw	BSZ30P055FMC
	32	Clamper	CEF1008
	33	Clamper	CEF1009
	34	Plug(CN901)	CKM1278
	35	Plug(CN221,851)	CKS-783
	36	•••••	
	37	Plug(CN141,852)	CKS-784
	38	•••••	
	39	Plug(CN131)	CKS-786
	40	Plug(CN101)	CKS1044
	41	Plug(CN451,804)	CKS1222
	42	•••••	
	43	Plug(CN803)	CKS1225
	44	Connector(CN801)	CKS1564
	45	Connector(CN671)	CKS2779
	46	Connector(CN681)	CKS3583
	47	Connector(CN222)	CKS3781
	48	Holder	CNC8011
	49	•••••	
	50	Case	CNC8014
	51	Holder	CNC8013
	52	Holder	CNC8021
	53	Insulator	CNM4684
	54	Insulator	CNM5626
	55	Holder	CNV1906
	56	FM/AM Tuner Unit	See Contrast table(2)
	57	Holder	See Contrast table(2)
	58	DSP Unit	CWX2213
	59	Connector(CN3001)	CKS3782
	60	Case	CNC8015
	61	High Out Unit	CWX2215
	62	Cord Assy	CDE5555
	63	Plug(CN4153)	CKS1045
*	64	Plug(CN4152)	CKS1613
	65	Plug(CN4051)	CKS1614
	66	Holder	CNC8009
	67	Holder	CNC7556
	68	Shield	CNC8010
	69	Insulator	CNM4760
	70	Insulator	CNM5650
	71	Insulator	CNM5651
	72	Shield	CNC6224
	73	Shield	CNC6274
	74	Insulator	CNM4610
	75	Insulator	CNM4814
	76	D/D Converter Unit	CWM4538
	77	Chassis Unit	CXB2295
	78	Screw	BMZ20P030FMC
	79	Screw	BMZ20P030FZK
	80	Screw	BPZ20P060FMC
	81	Screw	CBA1060
	82	Screw	CBA1061
	83	Screw	CBA1082
	84	Screw	CBA1430
	85	Screw	CBA1415
	86	Washer	CBF1038
	87	Washer	CBF1039
	88	Spring	CBH2063
	89	Spring	CBH2086
	90	Cord	CDE5587

Mark	No.	Description	Part No.
	91	Cord	CDE5596
	92	Cord	CDE5597
	93	Socket	CKS2497
	94	Roller	CLA3458
	95	Frame	CNC7548
	96	Spacer	CNM5808
	97	PCB	CNP5065
	98	Cover	CNS4841
	99	Holder	CNV2141
	100	Gear	CNV5271
	101	Torque Limiter Unit	CNV5272
	102	Gear	CNV5273
	103	Rack	CNV5274
	104	Lighting Conductor	CNV5276
	105	Guide	CNV5356
	106	Gathering PCB	CNX2961
	107	Mini Jack(CN4602)	CKN1015
	108	Plug(CN4601)	CKS-786
	109	Panel Unit	CXB2212
	110	Arm Unit	CXB2215
	111	Frame Unit	CXB2216
	112	Holder Unit	CXB2217
	113	Arm Unit	CXB2218
	114	Bracket Unit	CXB2598
	115	Motor	CXM1085
	116	ASL Unit	CWX2216
	117	Handle	CNC5395
	118	Cord	CDE5763
	119	Plug(CN4501)	CKS-784
	120	Case	CNB2299
	121	Case	CNB2300
	122	Bush	CNV1917
	123	•••••	
	124	•••••	
	125	•••••	

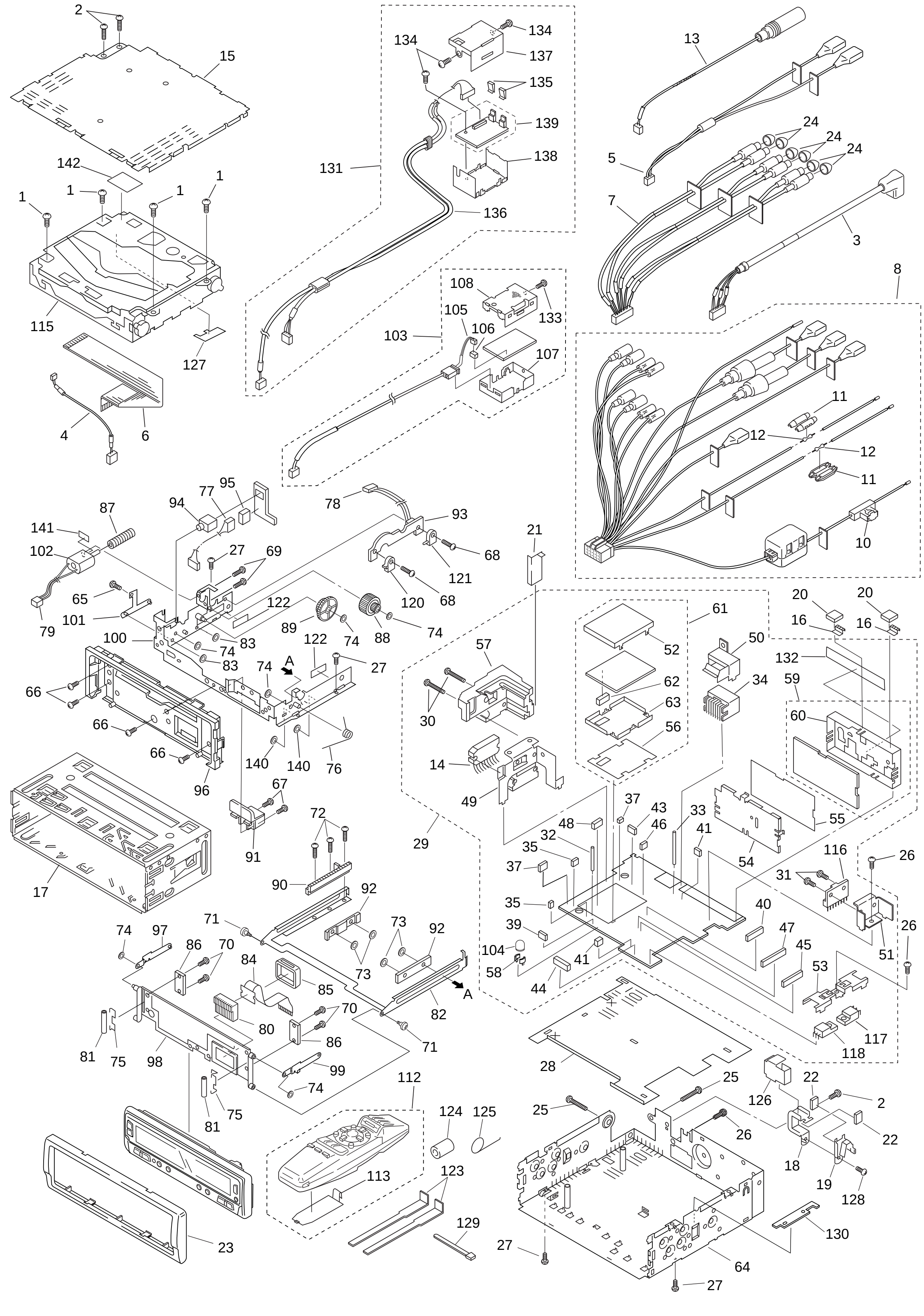
Mark	No.	Description	Part No.
	126	Remote Control Assy	See Contrast table(2)
	127	Battery Cover	CNS5032
	128	•••••	
	129	CD Mechanism Module(H1)	CXK5101
	130	IC(IC941)	PA2024A
	131	IC(IC871)	NJM78M05FA
	132	Transistor(Q992)	2SD2396
	133	Holder	CNC8012
	134	•••••	
	135	Switch(S951)	CSN1012
	136	Switch(S952)	CSN1022
	137	Spacer	CNM5988
	138	Lamp(IL801)	CEL1359
	139	Spacer	CNM6053
	140	Screw	BSZ26P080FMC
*	141	Lock Tie	CNV-754
	142	•••••	
	143	Guide Unit	CXB3234
	144	Inverter Assy	MWM9028
	145	Terminal (CN4001,4002,4003,4004)	CKF1023
	146	Spacer	CNM5996
	147	Screw	BSZ30P055FMC
	148	Screw	BSZ26P050FMC
	149	Clip	MBK9001
	150	Cord	MDE9018
	151	Holder	MNC9008
	152	Holder	MNC9009
	153	Inverter Unit	MWM9026
	154	Spacer	CNM6069
	155	Spacer	CNM6093
	156	Cushion	CNM6065

(2) CONTRAST TABLE

DEX-P1R/UC and DEX-P1/ES are constructed same except for the following:

Mark No.	Description	Part No.	
		DEX-P1R/UC	DEX-P1/ES
6	Cord Assy	CDE5538	CDE5539
30	Tuner Amp Unit	CWM5693	CWM5699
56	FM/AM Tuner Unit	CWE1472	CWE1485
57	Holder	CNC6554	CNC6555
126	Remote Control Assy	CXB2758	CXB2764

● DEH-P946/ES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● EXTERIOR (1) SECTION PARTS LIST

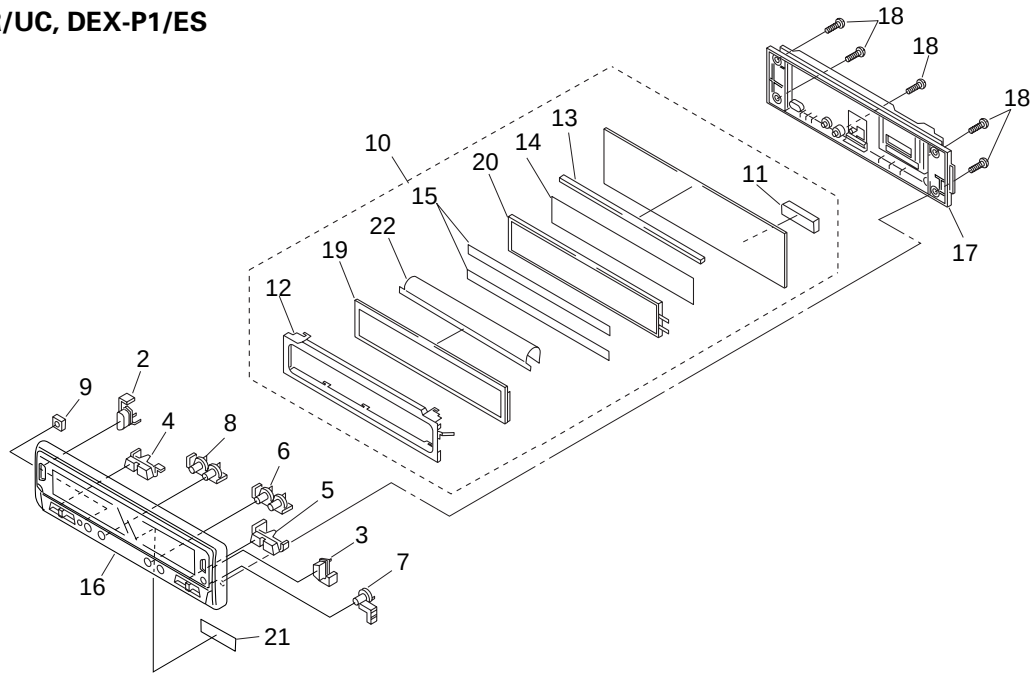
Mark No.	Description	Part No.
1	Screw	BSZ26P050FMC
2	Screw	BSZ30P055FMC
3	Cord Assy	CDE5785
4	Cord	CDE5536
5	Cord Assy	CDE5539
6	Connector	CDE5543
7	Cord Assy	CDE5625
8	Cord Assy	CDE5656
9	•••••	
10	Fuse	CEK1136
11	Cap	CNS1472
12	Resistor	RS1/2PMF102J
13	Antenna Cable	CDH1115
14	IC(IC301)	TDA7386
15	Case	CNB2278
16	Earth Terminal	CNC7358
17	Holder	CNC6798
18	Holder	CNC7566
19	Holder	CNC7753
20	Spacer	CNM4913
21	Spacer	CNM6052
22	Cushion	CNM5811
23	Panel	CNS5191
24	Cap	CNV2680
25	Screw	BMZ30P180FMC
26	Screw	BSZ30P055FMC
27	Screw	CBA1447
28	Insulator	CNM5627
29	Tuner Amp Unit	CWM5697
30	Screw	BMZ26P200FMC
31	Screw	BSZ30P055FMC
32	Clamper	CEF1008
33	Clamper	CEF1009
34	Plug(CN901)	CKM1278
35	Plug(CN221,851)	CKS-783
36	•••••	
37	Plug(CN141,852)	CKS-784
38	•••••	
39	Plug(CN131)	CKS-786
40	Plug(CN101)	CKS1044
41	Plug(CN451,804)	CKS1222
42	•••••	
43	Plug(CN803)	CKS1225
44	Connector(CN801)	CKS1564
45	Connector(CN671)	CKS2779
46	Connector(CN681)	CKS3583
47	Connector(CN231)	CKS3592
48	Connector(CN222)	CKS3781
49	Holder	CNC7554
50	Holder	CNC8011
51	Holder	CNC8012
52	Case	CNC8014
53	Holder	CNC8013
54	Holder	CNC8021
55	Insulator	CNM4684
56	Insulator	CNM5626
57	Heat Sink	CNR1468
58	Holder	CNV1906
59	FM/AM Tuner Unit	CWE1485
60	Holder	CNC6555
61	DSP Unit	CWX2213
62	Connector(CN3001)	CKS3782
63	Case	CNC8015
64	Chassis Unit	CXB2304
65	Screw	BMZ20P030FMC
66	Screw	BMZ20P030FZK
67	Screw	BPZ20P060FMC
68	Screw	CBA1060
69	Screw	CBA1061
70	Screw	CBA1082
71	Screw	CBA1430
72	Screw	CBA1454
73	Washer	CBF1038
74	Washer	CBF1039
75	Spring	CBH2063
76	Spring	CBH2086
77	Cord	CDE5587
78	Cord	CDE5596
79	Cord	CDE5597
80	Socket	CKS2497
81	Roller	CLA3458
82	Frame	CNC7548
83	Spacer	CNM5808
84	PCB	CNP5065
85	Cover	CNS4841
86	Holder	CNV2141
87	Gear	CNV5271
88	Torque Limiter Unit	CNV5272
89	Gear	CNV5273
90	Rack	CNV5274

Mark	No.	Description	Part No.
	91	Lighting Conductor	CNV5276
	92	Guide	CNV5356
	93	Gathering PCB	CNX2961
	94	Mini Jack(CN4602)	CKN1015
	95	Plug(CN4601)	CKS-786
	96	Panel Unit	CXB2211
	97	Arm Unit	CXB2215
	98	Holder Unit	CXB2217
	99	Arm Unit	CXB2218
	100	Frame Unit	CXB2216
	101	Bracket Unit	CXB2598
	102	Motor	CXM1085
	103	ASL Unit	CWX2216
	104	Lamp(IL801)	CEL1359
	105	Cord	CDE5763
	106	Plug(CN4501)	CKS-784
	107	Case	CNB2299
	108	Case	CNB2300
	109	•••••	
	110	•••••	
	111	•••••	
	112	Remote Control Assy	CXB2655
	113	Battery Cover	CNS5032
	114	•••••	
	115	CD Mechanism Module(H1)	CXK5101

Mark	No.	Description	Part No.
	116	IC(IC941)	PA2024A
	117	IC(IC871)	NJM78M05FA
	118	Transistor(Q992)	2SD2396
	119	•••••	
	120	Switch(S951)	CSN1012
	121	Switch(S952)	CSN1022
	122	Spacer	CNM5988
	123	Handle	CNC5395
	124	Bush	CNV1917
	125	Spring	CBH-865
	126	Holder	CNC8044
	127	Spacer	CNM6053
	128	Screw	BSZ26P080FMC
*	129	Lock Tie	CNV-754
	130	Guide Unit	CXB3234
	131	Inverter Assy	MWM9028
	132	Spacer	CNM5996
	133	Screw	BSZ30P055FMC
	134	Screw	BSZ26P050FMC
	135	Clip	MBK9001
	136	Cord	MDE9018
	137	Holder	MNC9008
	138	Holder	MNC9009
	139	Inverter Assy	MWM9026
	140	Spacer	CNM6069
	141	Spacer	CNM6093
	142	Cushion	CNM6065

2.3 EXTERIOR (2)

● **DEX-P1R/UC, DEX-P1/ES**



● **EXTERIOR (2) SECTION PARTS LIST**

(1) PARTS LIST

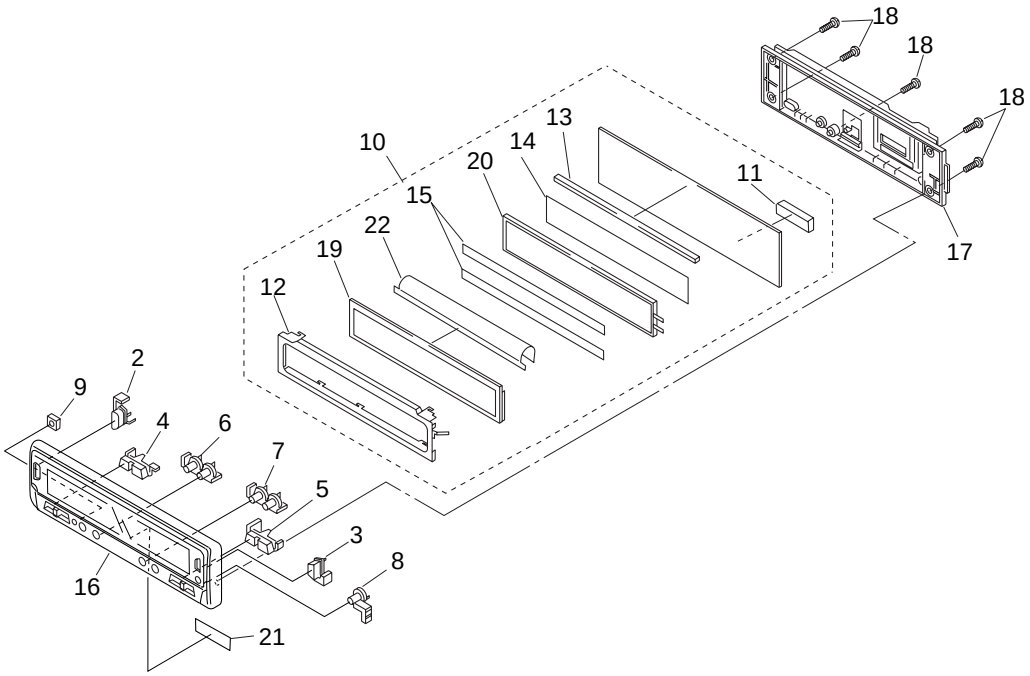
Mark	No.	Description	Part No.
	1	•••••	
	2	Button(+,–)	CAC5486
	3	Button(OPEN/EJECT)	CAC5488
	4	Button(S/A,CLOCK)	CAC5490
	5	Button(TRACK/SEEK)	CAC5494
	6	Button	CAC5499
	7	Button(SOURCE/OFF)	CAC5504
	8	Button	See Contrast table(2)
	9	Spacer	CNM5910
	10	Keyboard Unit	See Contrast table(2)
	11	Plug(CN1901)	CKS2496
	12	Holder	CNC7547
	13	Spacer	CNM5622
	14	Spacer	CNM5623
	15	Spacer	CNM5894
	16	Grille Unit	See Contrast table(2)
	17	Cover Unit	CXB2208
	18	Screw	BPZ20P080FZK
*	19	LCD(LCD1901)	See Contrast table(2)
	20	EL(EL1901)	CEL1580
	21	Spacer	CNM6021
*	22	PCB	CNP5063

(2) CONTRAST TABLE

DEX-P1R/UC and DEX-P1/ES are constructed same except for the following:

Mark	No.	Description	Part No.	
			DEX-P1R/UC	DEX-P1/ES
	8	Button	CAC5638	CAC5498
	10	Keyboard Unit	CWM5686	CWM5689
	16	Grille Unit	CXB2201	CXB2206
*	19	LCD(LCD1901)	CAW1470	CAW1471

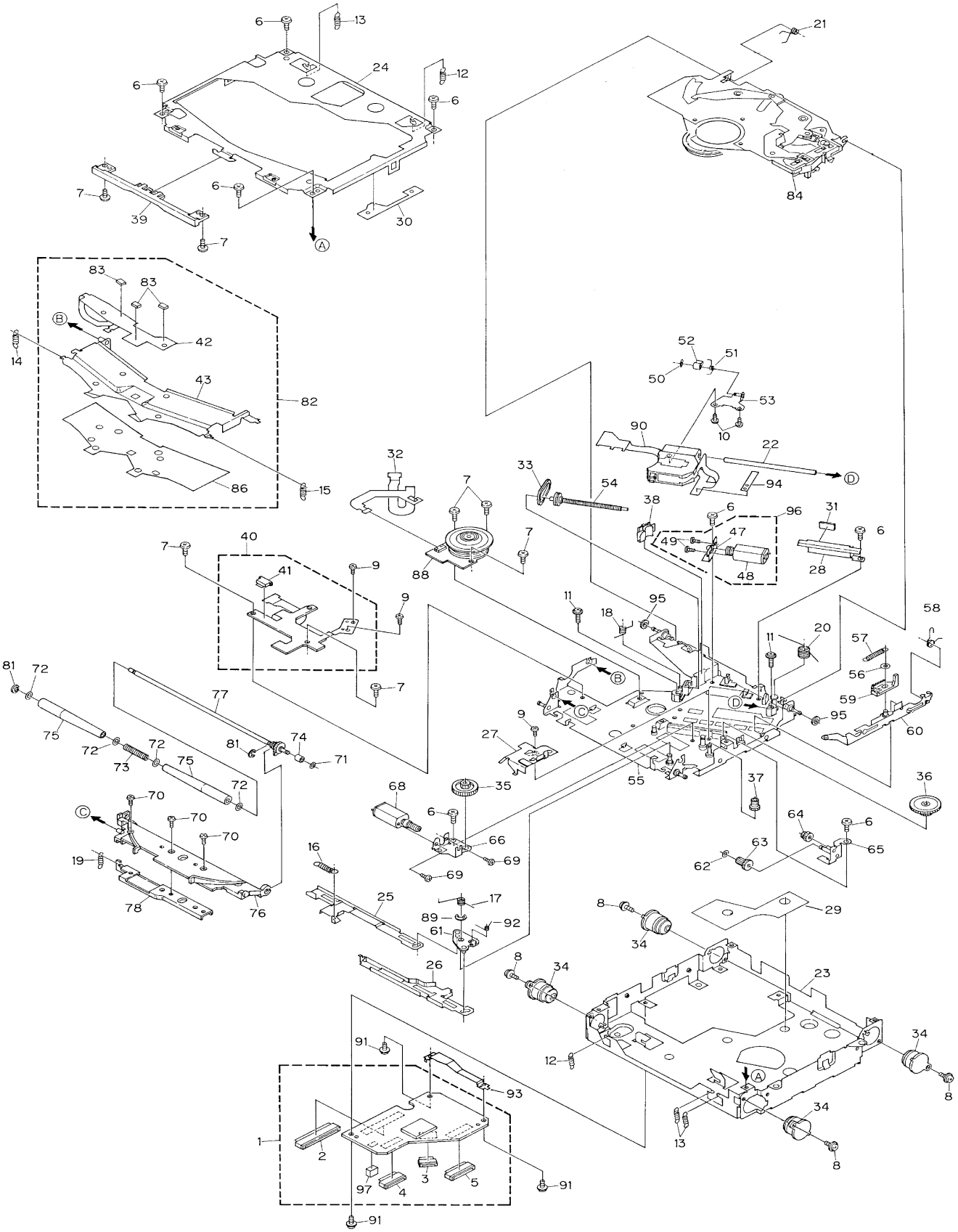
● **DEH-P946/ES**



● **EXTERIOR (2) SECTION PARTS LIST**

Mark	No.	Description	Part No.
	1	•••••	
	2	Button(+,–)	CAC5486
	3	Button(OPEN/EJECT)	CAC5488
	4	Button(S/A,CLOCK)	CAC5490
	5	Button(TRACK/SEEK)	CAC5494
	6	Button	CAC5498
	7	Button	CAC5499
	8	Button(SOURCE/OFF)	CAC5504
	9	Spacer	CNM5910
	10	Keyboard Unit	CWM5689
	11	Plug(CN1901)	CKS2496
	12	Holder	CNC7547
	13	Spacer	CNM5622
	14	Spacer	CNM5623
	15	Spacer	CNM5894
	16	Grille Unit	CXB2204
	17	Cover Unit	CXB2207
	18	Screw	BPZ20P080FZK
*	19	LCD(LCD1901)	CAW1471
	20	EL(EL1901)	CEL1580
	21	Spacer	CNM6021
	22	PCB	CNP5063

2.4 CD MECHANISM MODULE



● CD MECHANISM MODULE SECTION PARTS LIST

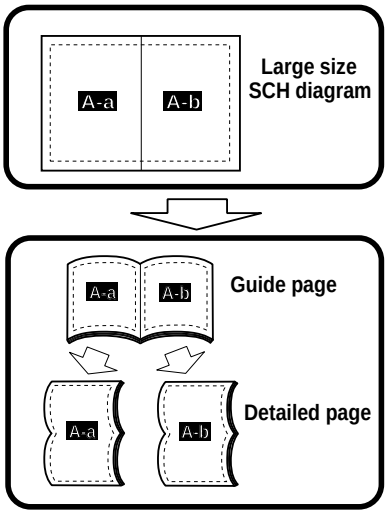
Mark	No.	Description	Part No.
	1	Control Unit	CWX2166
	2	Connector(CN701)	CKS1968
	3	Connector(CN802)	CKS3477
	4	Connector(CN801)	CKS3481
	5	Connector(CN101)	CKS3486
	6	Screw	BMZ20P025FMC
	7	Screw	CBA1037
	8	Screw	CBA1296
	9	Screw	CBA1340
	10	Screw	CBA1362
	11	Screw	CBA1440
	12	Spring	CBH2029
	13	Spring	CBH2030
	14	Spring	CBH2031
	15	Spring	CBH2032
	16	Spring	CBH2033
	17	Spring	CBH2207
	18	Spring	CBH2040
	19	Spring	CBH2041
	20	Spring	CBH2042
	21	Spring	CBH2052
	22	Shaft	CLA3232
	23	Frame	CNC7285
	24	Frame	CNC7286
	25	Lever	CNC7288
	26	Lever	CNC7289
	27	Cover	CNC7294
	28	Cover	CNC7304
	29	Sheet	CNM5401
	30	Sheet	CNM5402
	31	Sheet	CNM5814
	32	PCB	CNP4854
	33	Belt	CNT1082
	34	Damper	CNV4984
	35	Gear	CNV5080
	36	Gear	CNV5081
	37	Gear	CNV5082
	38	Holder	CNV5098
	39	Guide	CNV5352
	40	Mechanism FPC Unit	CWX2191
	41	Connector	CKS3767
*	42	PCB	CNP4852
*	43	Arm	CNC7287
	44	•••••	
	45	•••••	
	46	•••••	
	47	Bracket	CNC7300
	48	Motor Unit	CXB1671
	49	Screw	JFZ14P020FNI
	50	Washer	CBF1037
	51	Spring	CBH2039
	52	Lack	CNV5471
	53	Bracket Unit	CXB1674
	54	Screw Unit	CXB1676
	55	Chassis Unit	CXB3042
	56	Washer	CBF1038
	57	Spring	CBH2035
	58	Spring	CBH2036
	59	Lever	CNV5078
	60	Lever Unit	CXB3207
	61	Arm Unit	CXB1680
	62	Washer	CBF1038
	63	Gear	CNV5083
	64	Gear	CNV5084
	65	Bracket Unit	CXB1682
	66	Bracket	CNC7292
	67	•••••	
	68	Motor Unit(M2)	CXB1684
	69	Screw	JFZ14P020FNI
	70	Screw	CBA1451
	71	Washer	CBF1037
	72	Washer	CBF1060
	73	Spring	CBH2170
	74	Roller	CLA3222
	75	Roller	CNV3412
	76	Arm	CNV5075
	77	Gear Unit	CXB1686
	78	Bracket Unit	CXB2627
	79	•••••	
	80	•••••	
	81	Washer	YE20FUC
	82	Guide Arm Assy	CXB1688
	83	Photo-transistor(P1-3)	CPT-230S-X
	84	Clamp Arm Assy	CXB3137
	85	•••••	
*	86	Sheet	CNM5398
	87	•••••	
	88	Motor(M3)	CXM1129
	89	Washer	YE25FUC
	90	Pickup Unit(Service)(P8)	CXX1290
	91	Screw	IMS20P035FMC
	92	Spring	CBH2206
	93	Bracket	CNC7977
	94	Sheet	CNM6039
	95	Sheet	CNM6055
	96	CRG Motor Assy(M1)	CXB1670
	97	Connector(CN702)	CKS2191

3. SCHEMATIC DIAGRAM

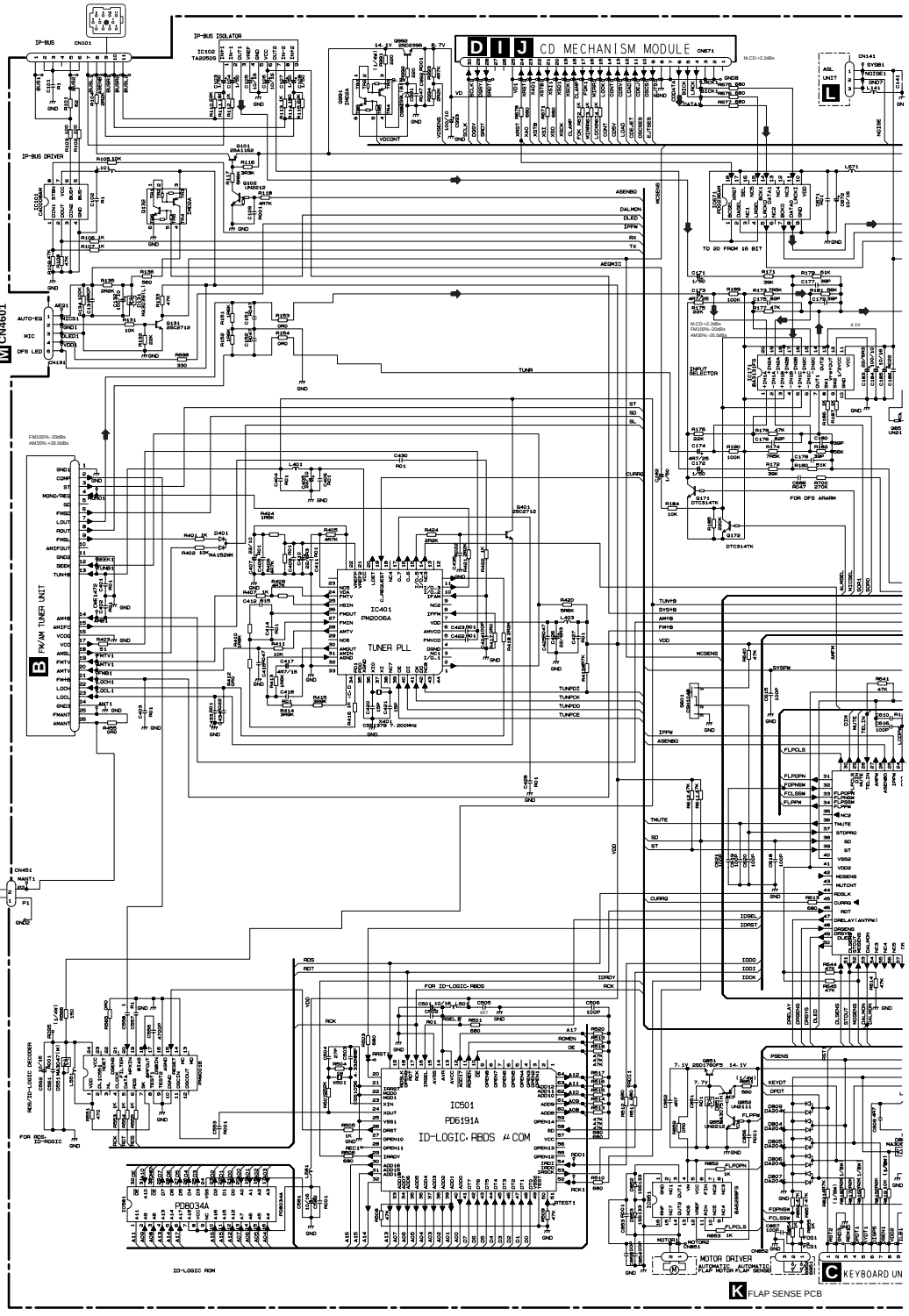
3.1 OVERALL CONNECTION DIAGRAM(GUIDE PAGE)

Note: When ordering service parts, be sure to refer to "EXPLODED VIEWS AND PARTS LIST" or "ELECTRICAL PARTS LIST".

● **DEX-P1R/UC**



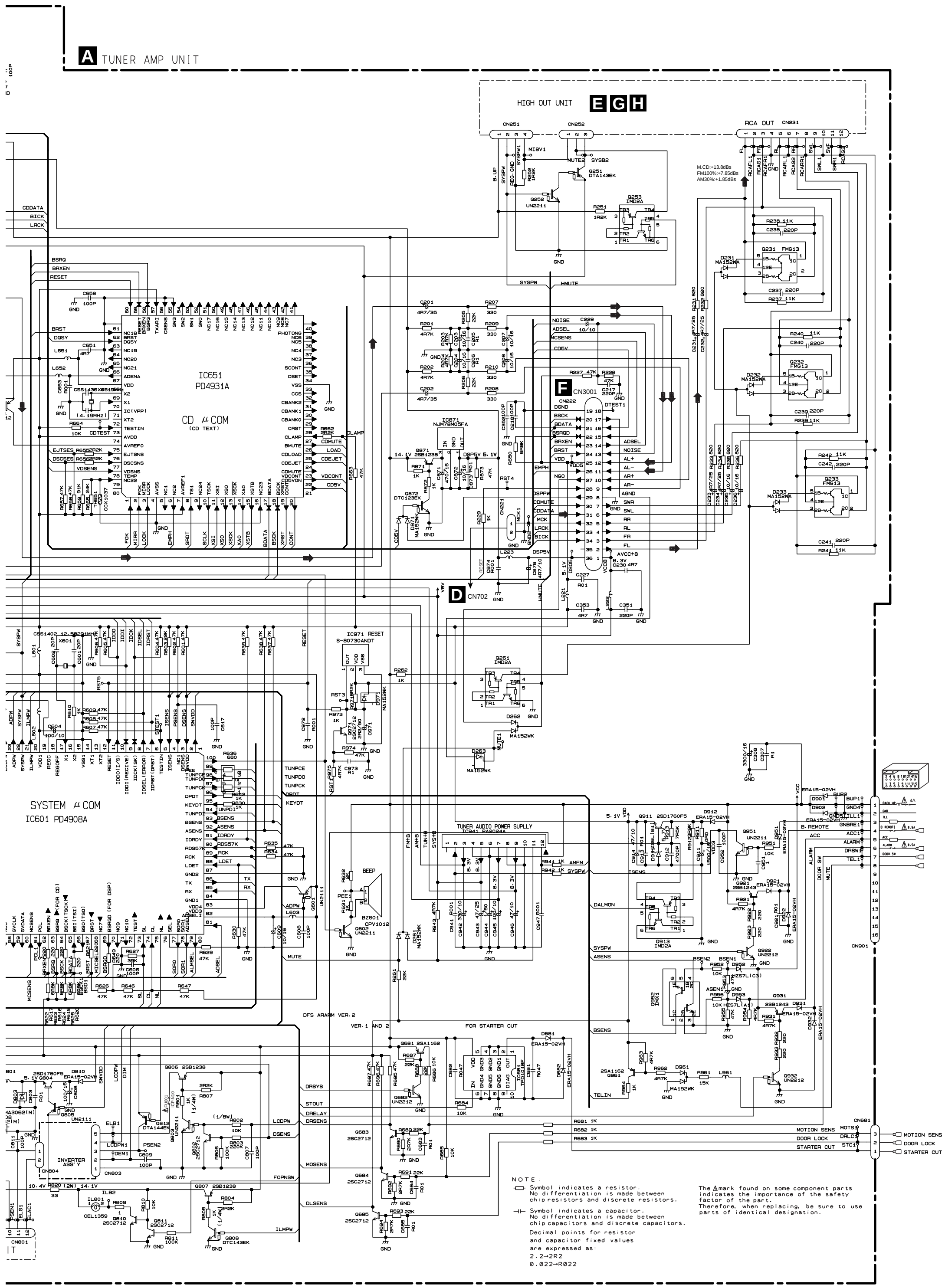
A-a



A

A-b

B



C

D

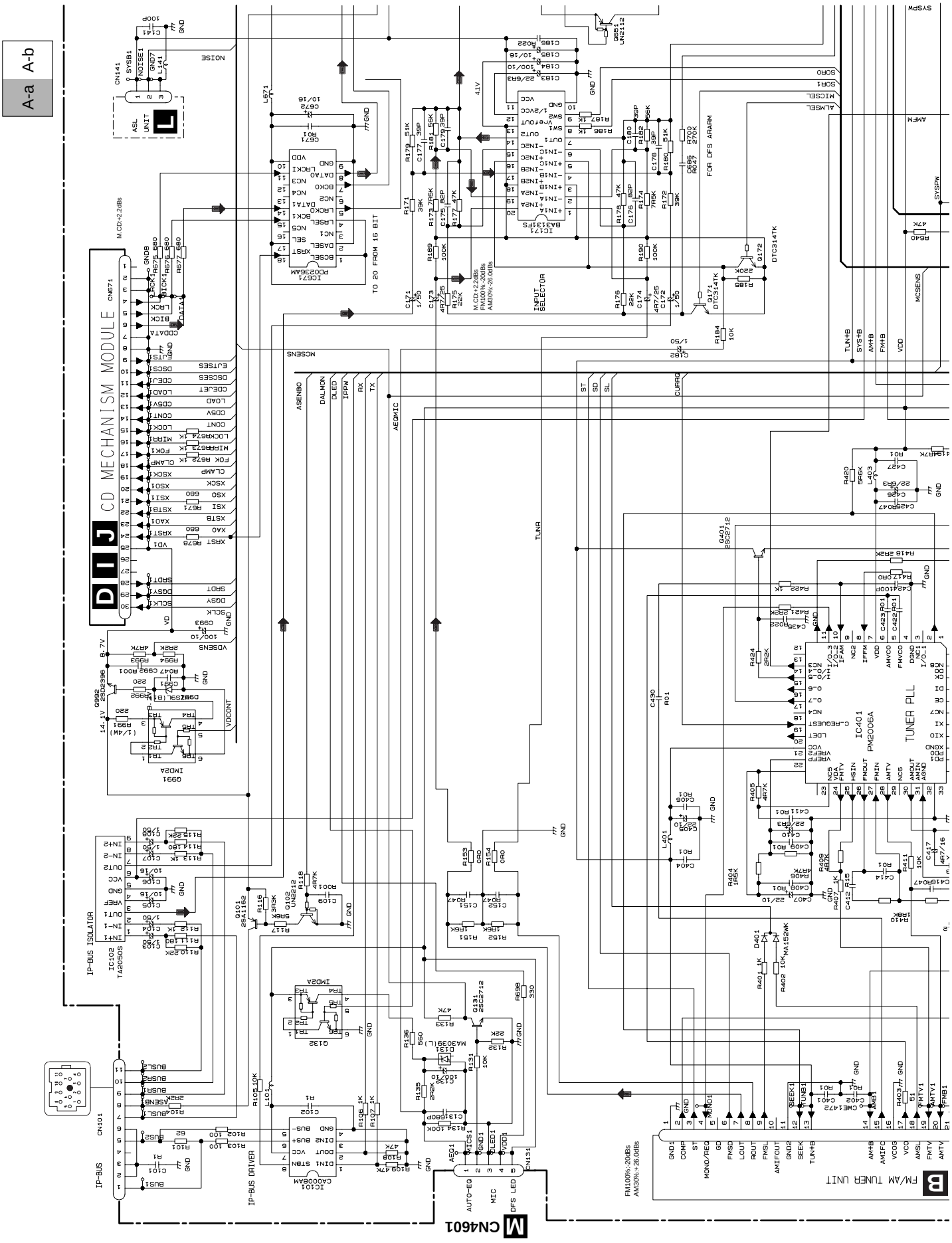
NOTE:

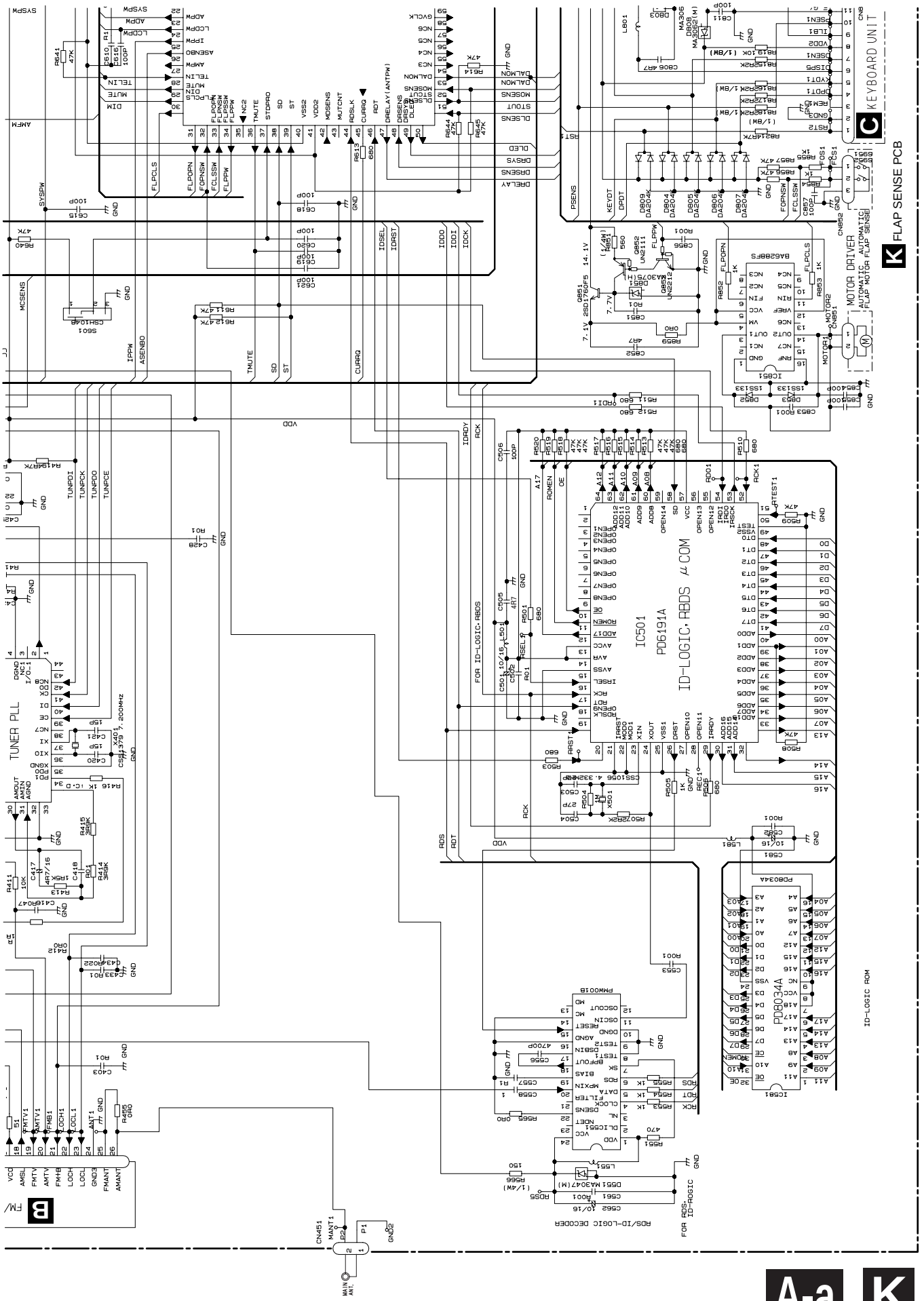
Symbol indicates a resistor.
No differentiation is made between chip resistors and discrete resistors.

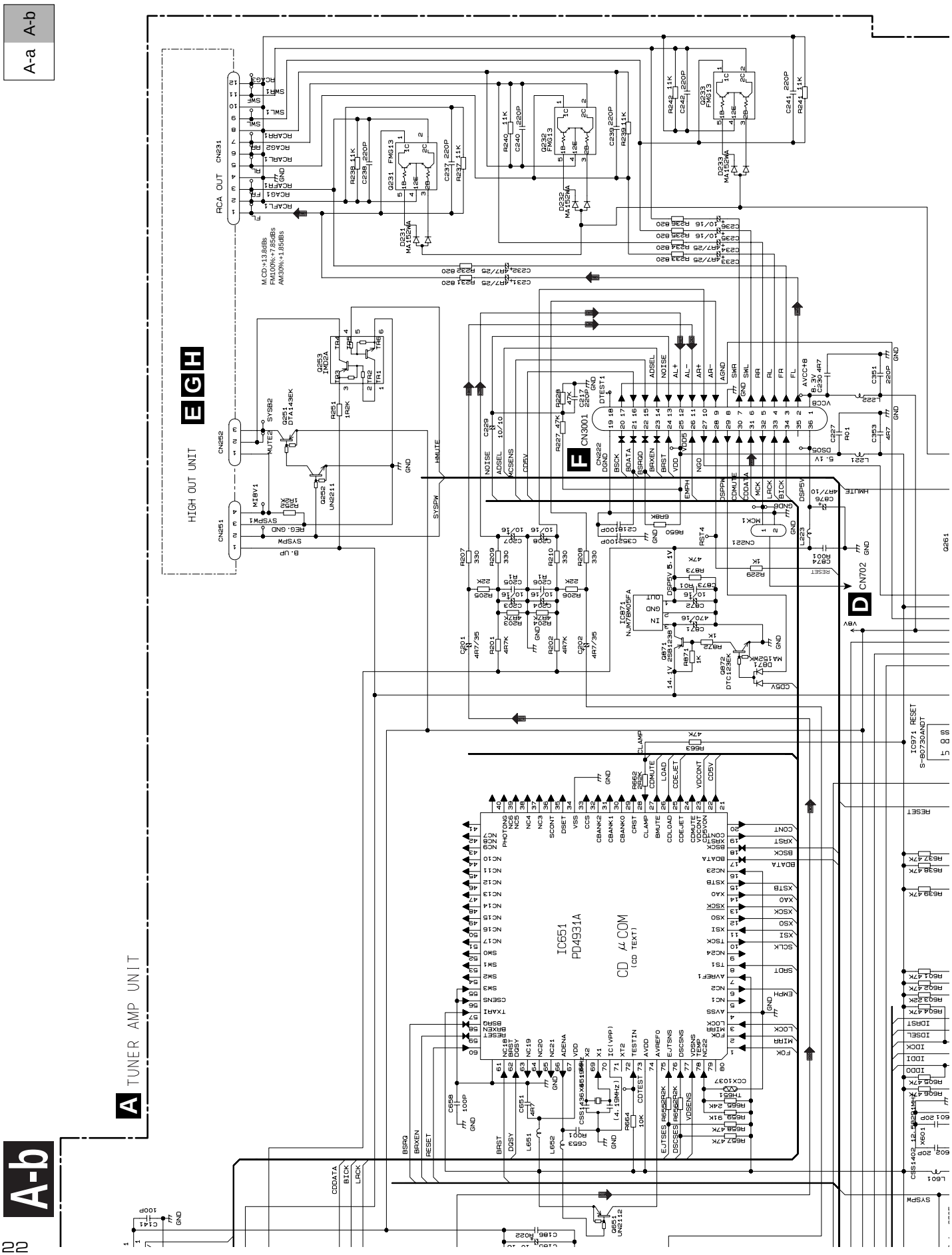
Symbol indicates a capacitor.
No differentiation is made between chip capacitors and discrete capacitors.

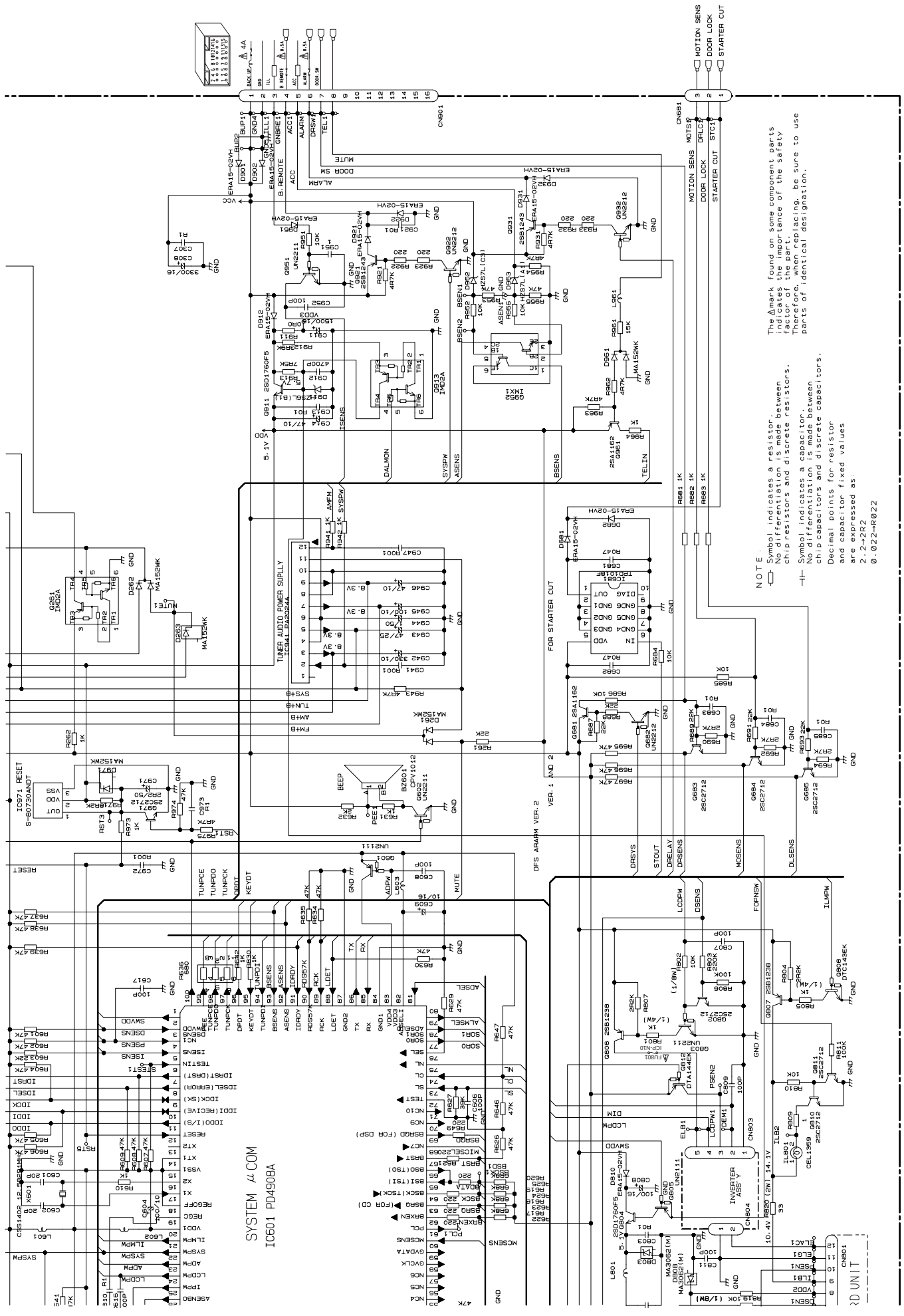
Decimal points for resistor and capacitor fixed values are expressed as:
2.2→2R2
0.022→R022

The ⚠mark found on some component parts indicates the importance of the safety factor of the part.
Therefore, when replacing, be sure to use parts of identical designation.


A-b
A-a
CD MECHANISM MODULE
FM/AM TUNER UNIT
CN4601
TUNER PLL
IC401
PM2006A
IP-BUS ISOLATOR
IP-BUS DRIVER
IP-BUS
TO 20 FROM 16 BIT
INPUT SELECTOR
FOR DFS ARARM
M.CD+2.2dBs
FM100%:-20dBs
AM30%:-26.0dBs
AUTO-EQ
MIC
DFS LED

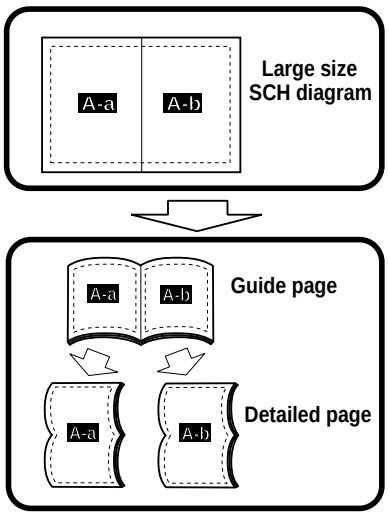

A-a A-b
KEYBOARD UNIT
FLAP SENSE PCB
MOTOR DRIVER
AUTOMATIC FLAP MOTOR FLAP SENSE
ID-LOGIC,RDBS μCOM
PD6191A
IC501
TUNER PLL
ID-LOGIC ROM
RDS/ID-LOGIC DECODER
FOR RDS-ID-ROGIC
FOR ID-LOGIC-RBDS
MAIN ANT.

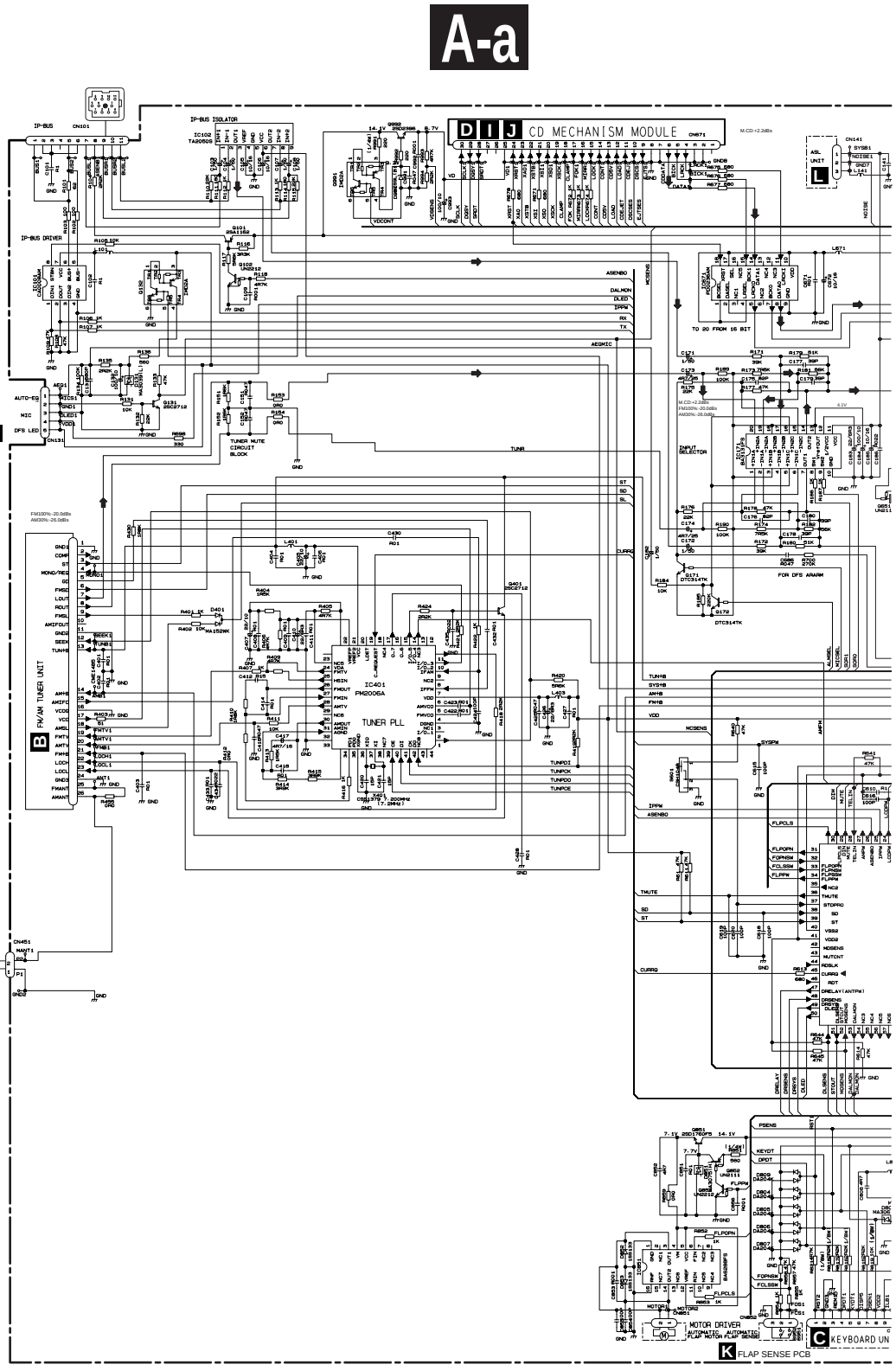

A-a
A-b
A-b
A TUNER AMP UNIT
E G H HIGH OUT UNIT
F
D
CN3001
CN702
IC651
PD4931A
CD μCOM
(CD TEXT)
IC971 RESET
S-80730ANDT
RCA OUT CN231
CN252
CN251
M.CD:+13.8dBs
FM100%:+7.85dBs
AM30%:+1.85dBs
B.UP
SYSPW
MUTE
HMUTE
RESET
BSRQ
BRXEN
BRST
DQSY
CDDATA
BICK
LRCK


SYSTEM μCOM
IC601 PD490A
NOTE :
Symbol indicates a resistor.
No differentiation is made between chip resistors and discrete resistors.
Symbol indicates a capacitor.
No differentiation is made between chip capacitors and discrete capacitors.
Decimal points for resistor and capacitor fixed values are expressed as:
2.2→2R2
0.022→R022
The ▲mark found on some component parts indicates the importance of the safety factor of the part.
Therefore, when replacing, be sure to use parts of identical designation.
MOTION SENS
DOOR LOCK
STARTER CUT
TUNER AUDIO POWER SUPPLY UNIT(A-board)
INVERTER ASS'Y
FOR STARTER CUT
VER. 1 AND 2
DFS ARARM VER. 2

3.2 OVERALL CONNECTION DIAGRAM(GUIDE PAGE)

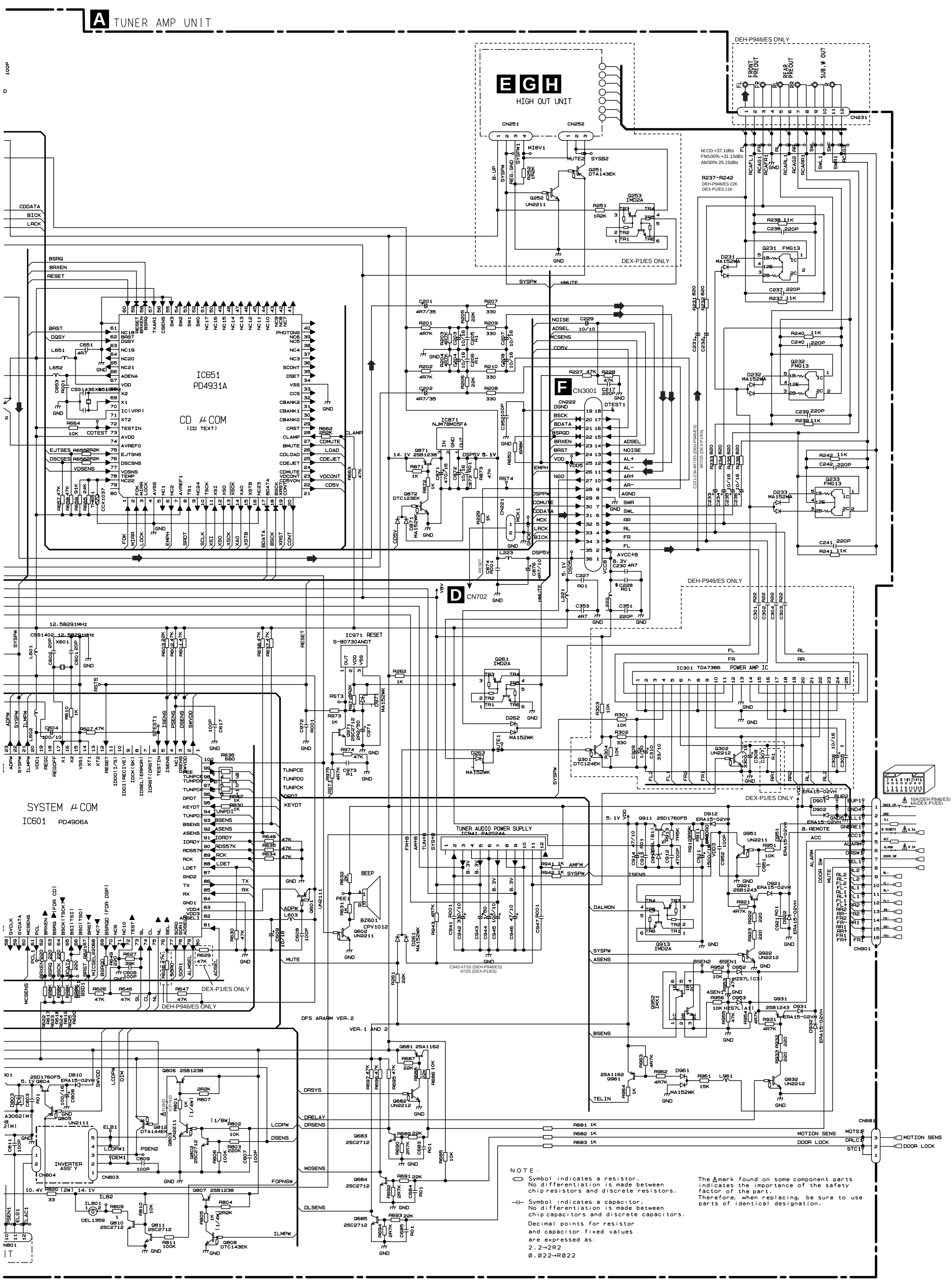
● **DEH-P946/ES,DEX-P1/ES**





A
B
C
D

A-b



NOTE:

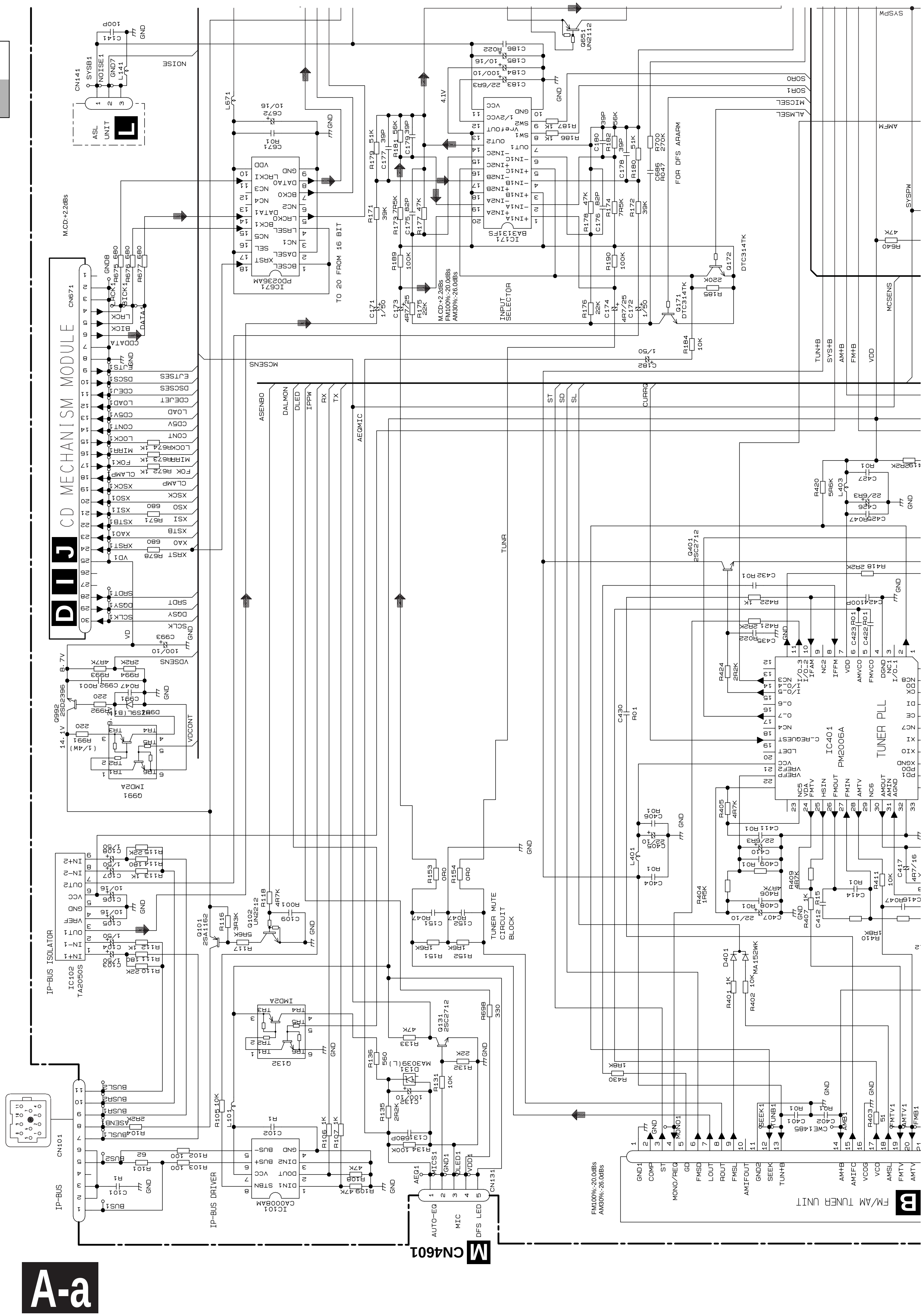
Symbol indicates a resistor.
No differentiation is made between chip resistors and discrete resistors.

Symbol indicates a capacitor.
No differentiation is made between chip capacitors and discrete capacitors.

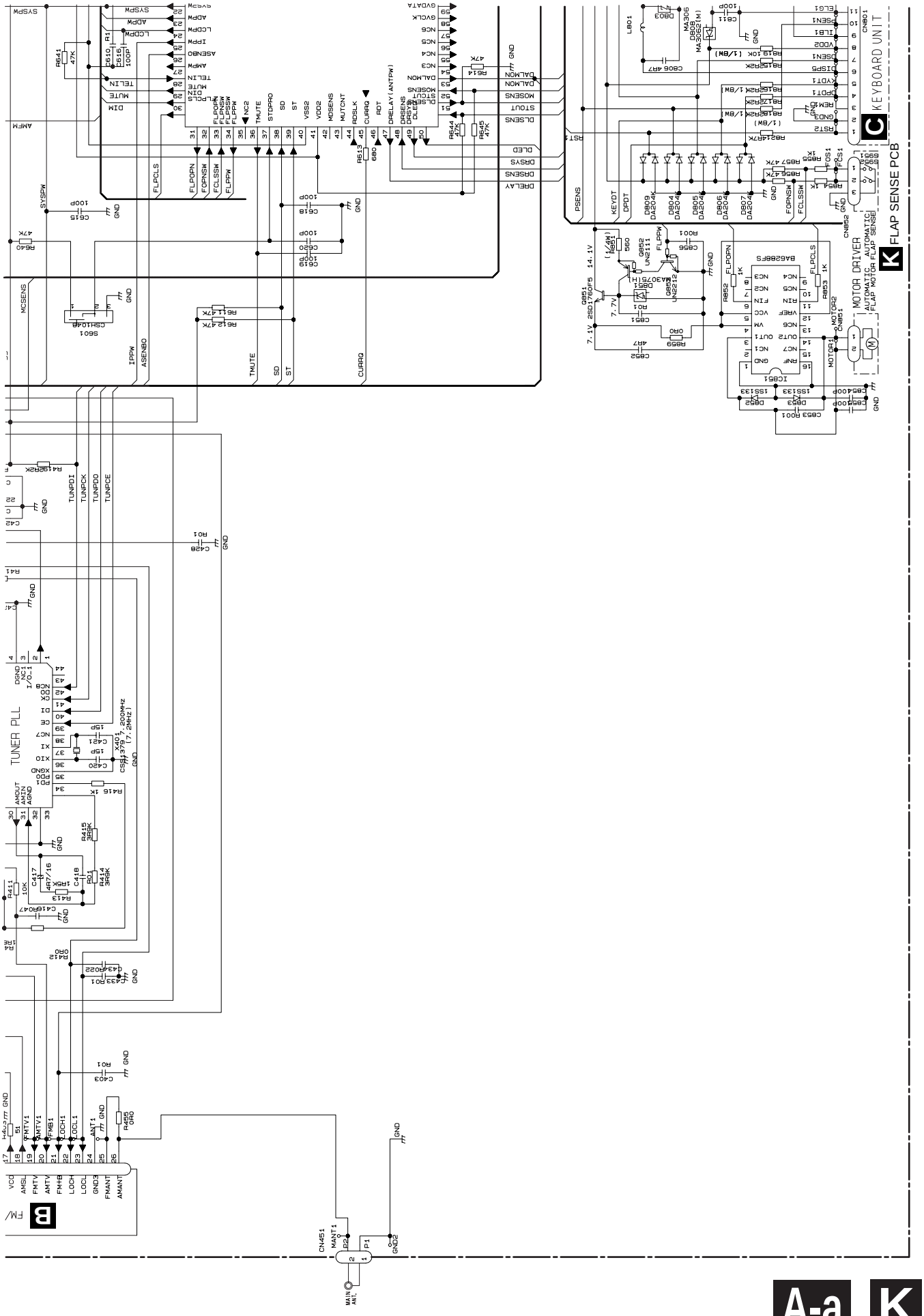
Decimal points for resistor and capacitor fixed values are expressed as:
2.2→2R2
0.022→R022

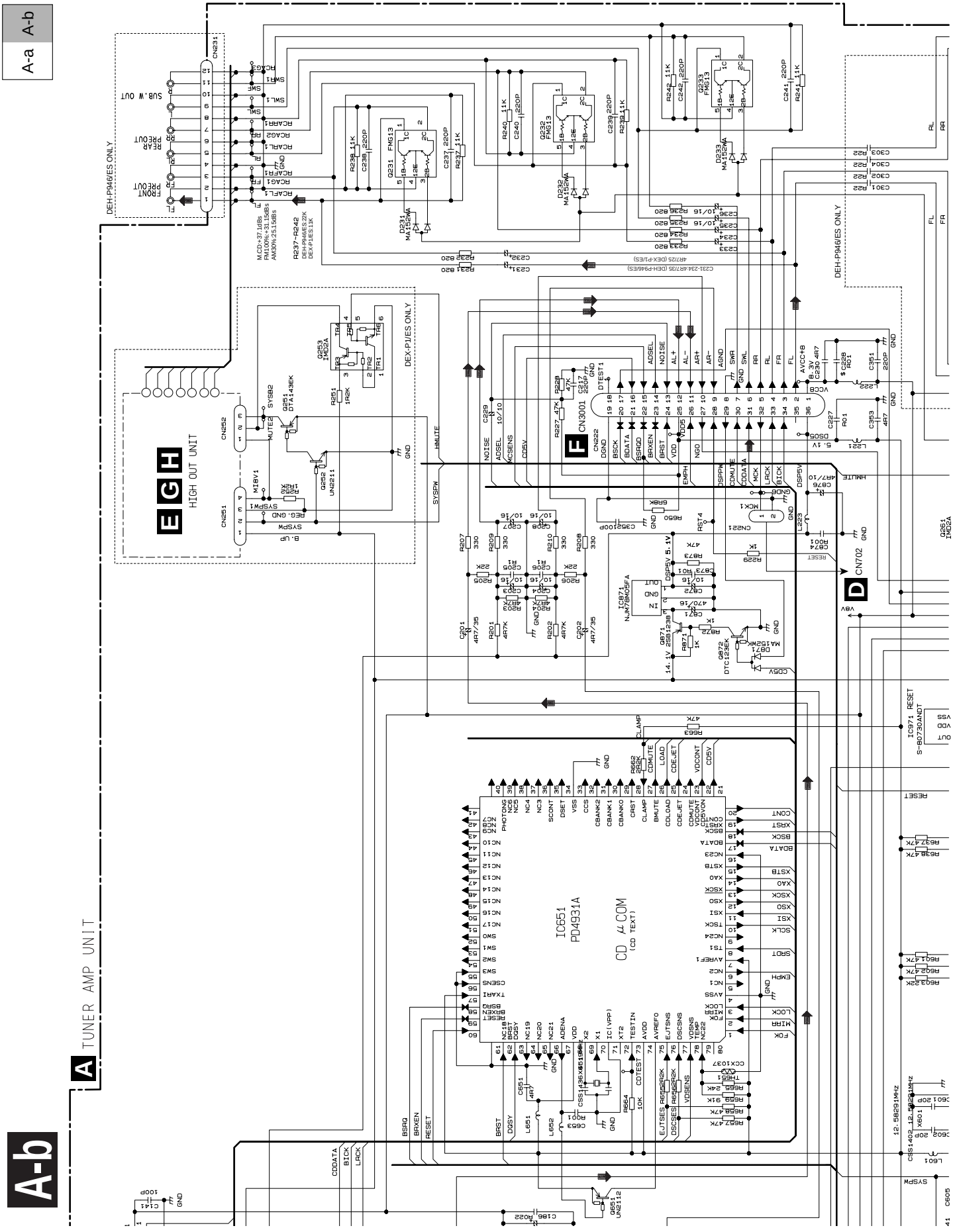
The ⚠ mark found on some component parts indicates the importance of the safety factor of the part.
Therefore, when replacing, be sure to use parts of identical designation.

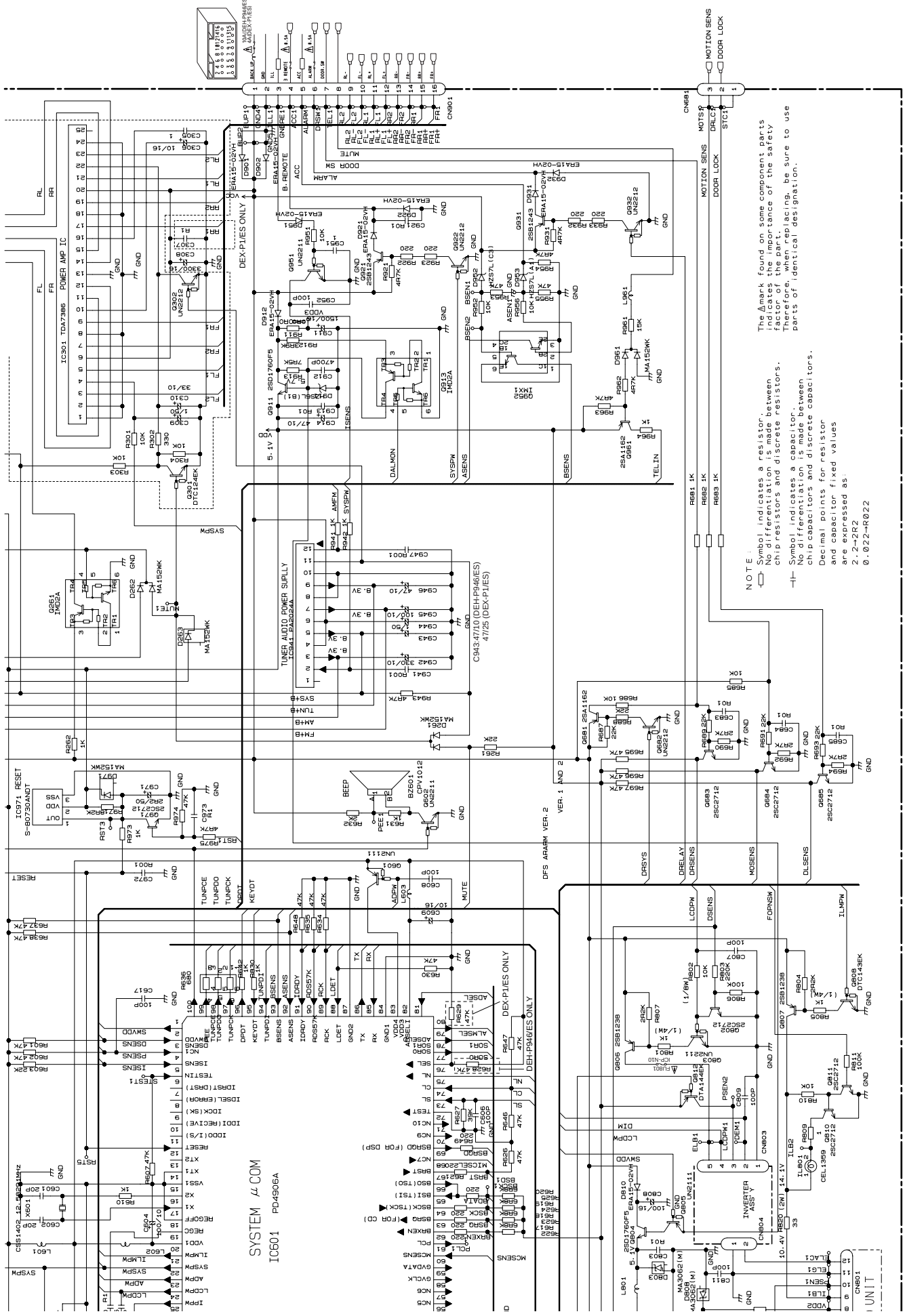
A-a A-b


CD MECHANISM MODULE
TUNER PLL
FM/AM TUNER UNIT
IP-BUS ISOLATOR
IP-BUS DRIVER
INPUT SELECTOR
TUNER MUTE CIRCUIT BLOCK
FOR DFS ARARM
CN4601

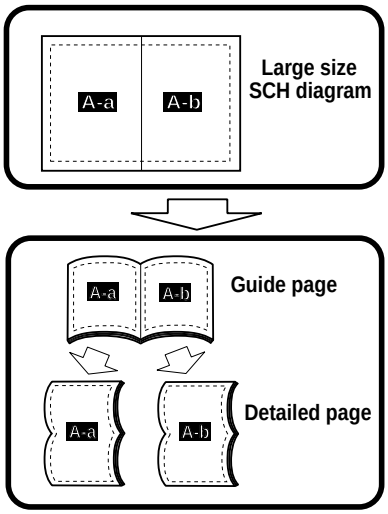
A-a

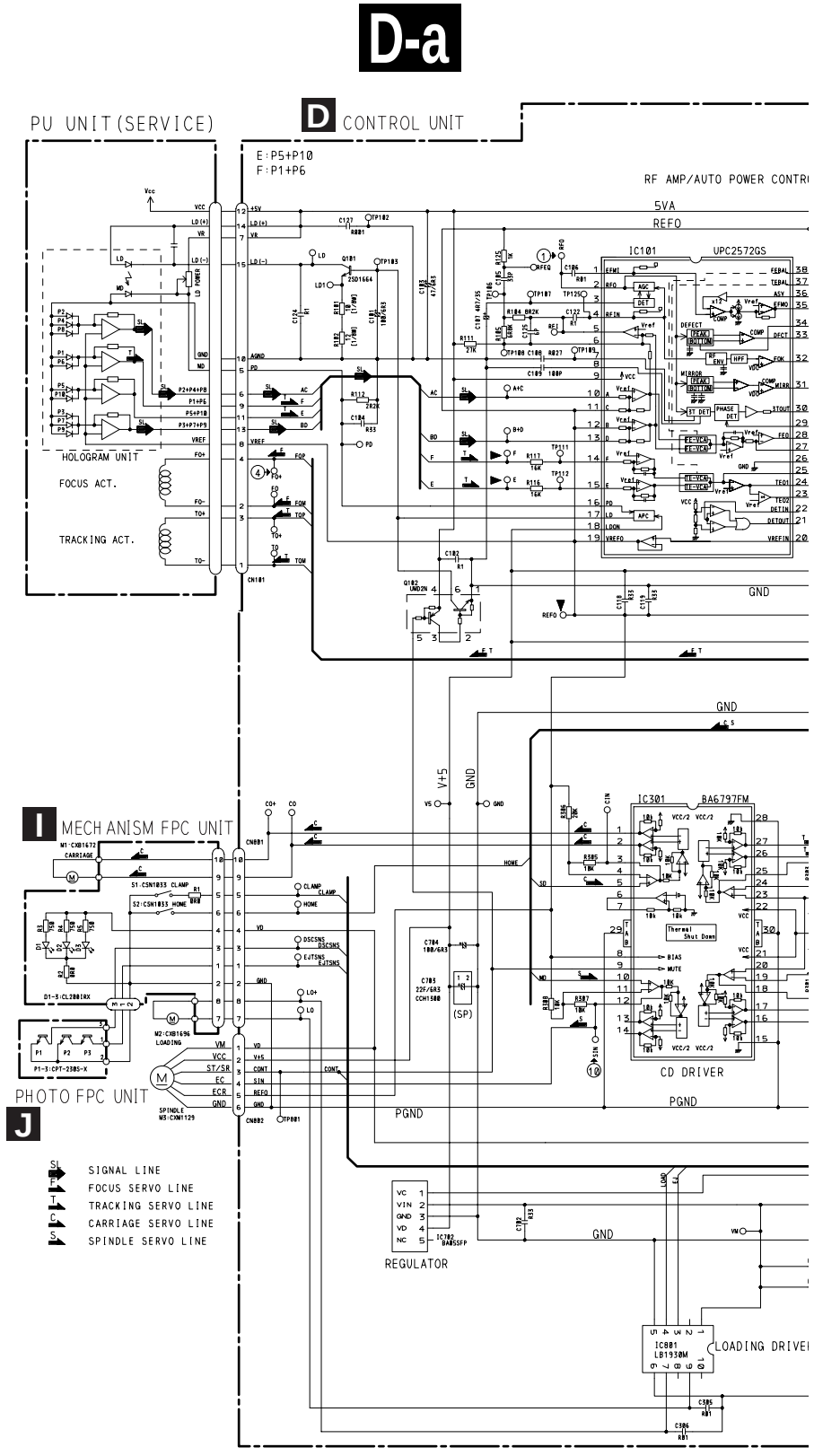

KEYBOARD UNIT
FLAP SENSE PCB
MOTOR DRIVER
AUTOMATIC FLAP MOTOR
AUTOMATIC FLAP SENSE
TUNER PLL
FM/


A-b
A-a
A
B
C
D
1
2
3
4
A TUNER AMP UNIT
E G H HIGH OUT UNIT
F CN3001
D CN702
DEH-P946/ES ONLY
DEX-P1/ES ONLY
IC651
PD4931A
CD μCOM
(CD TEXT)
SUB.W OUT
REAR PREOUT
FRONT PREOUT
HMUTE
SYSPW
RESET
CDDATA
BICK
LRCK
BSRQ
BRXEN
BRST
DDSY
BSCK
BDATA
XSTB
XAO
XSCK
XSO
XSI
TSCK
SCLK
SRDT
EMPH
MIRR
FOK
CCX1037
12.5821MHz
SYSPW

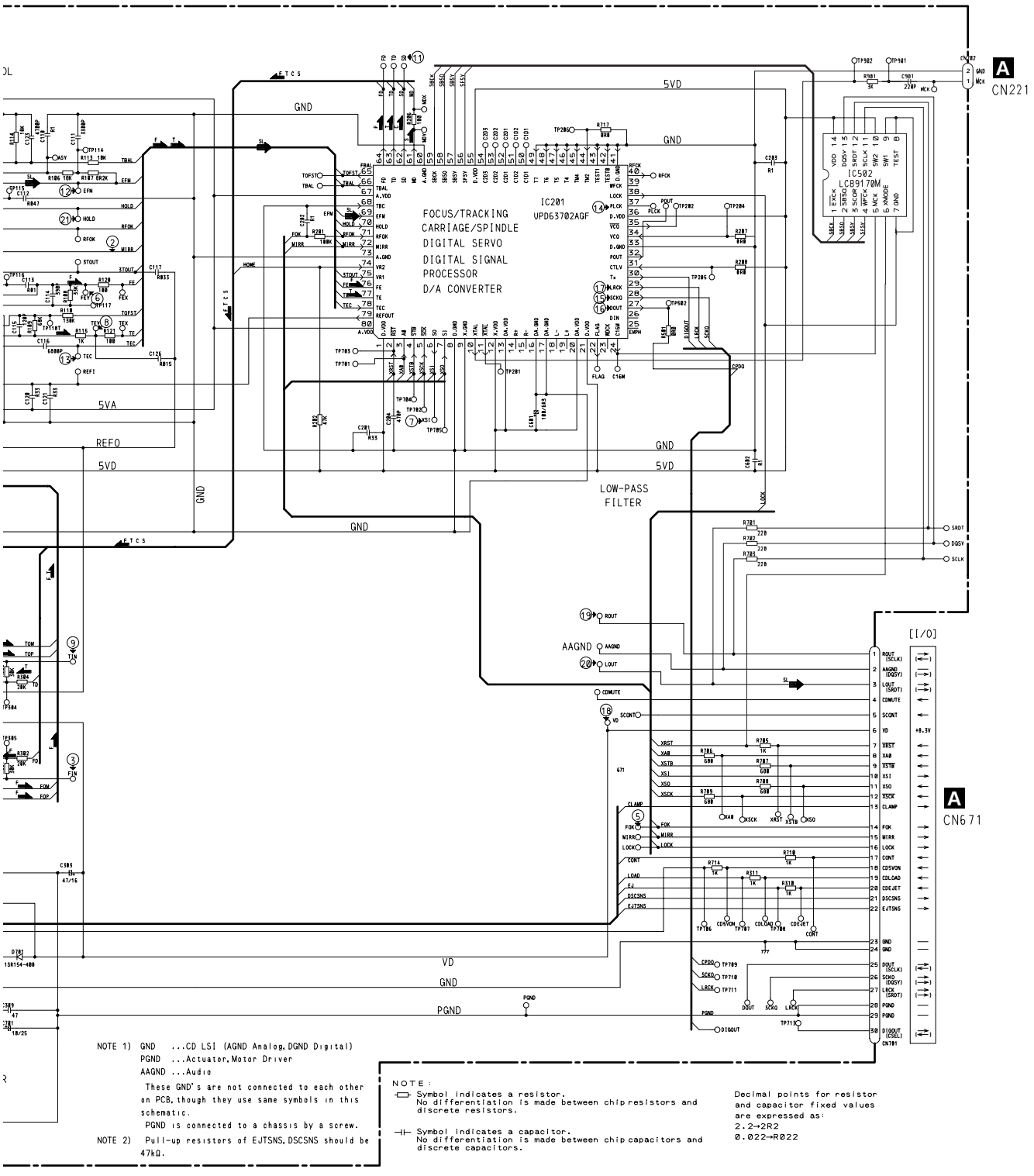

SYSTEM μCOM
IC501 PD4906A
DEH-P946/ES ONLY
DEX-P1/ES ONLY
TUNER AUDIO POWER SUPPLY
IC941 PA2024A
INVERTER ASS'Y
MOTION SENS
DOOR LOCK
NOTE :
Symbol indicates a resistor.
No differentiation is made between chip resistors and discrete resistors.
Symbol indicates a capacitor.
No differentiation is made between chip capacitors and discrete capacitors.
Decimal points for resistor and capacitor fixed values are expressed as :
2.2→2R2
0.022→R022
The ▲mark found on some component parts indicates the importance of the safety factor of the part.
Therefore, when replacing, be sure to use parts of identical designation.

3.3 CD MECHANISM MODULE(GUIDE PAGE)





D-b



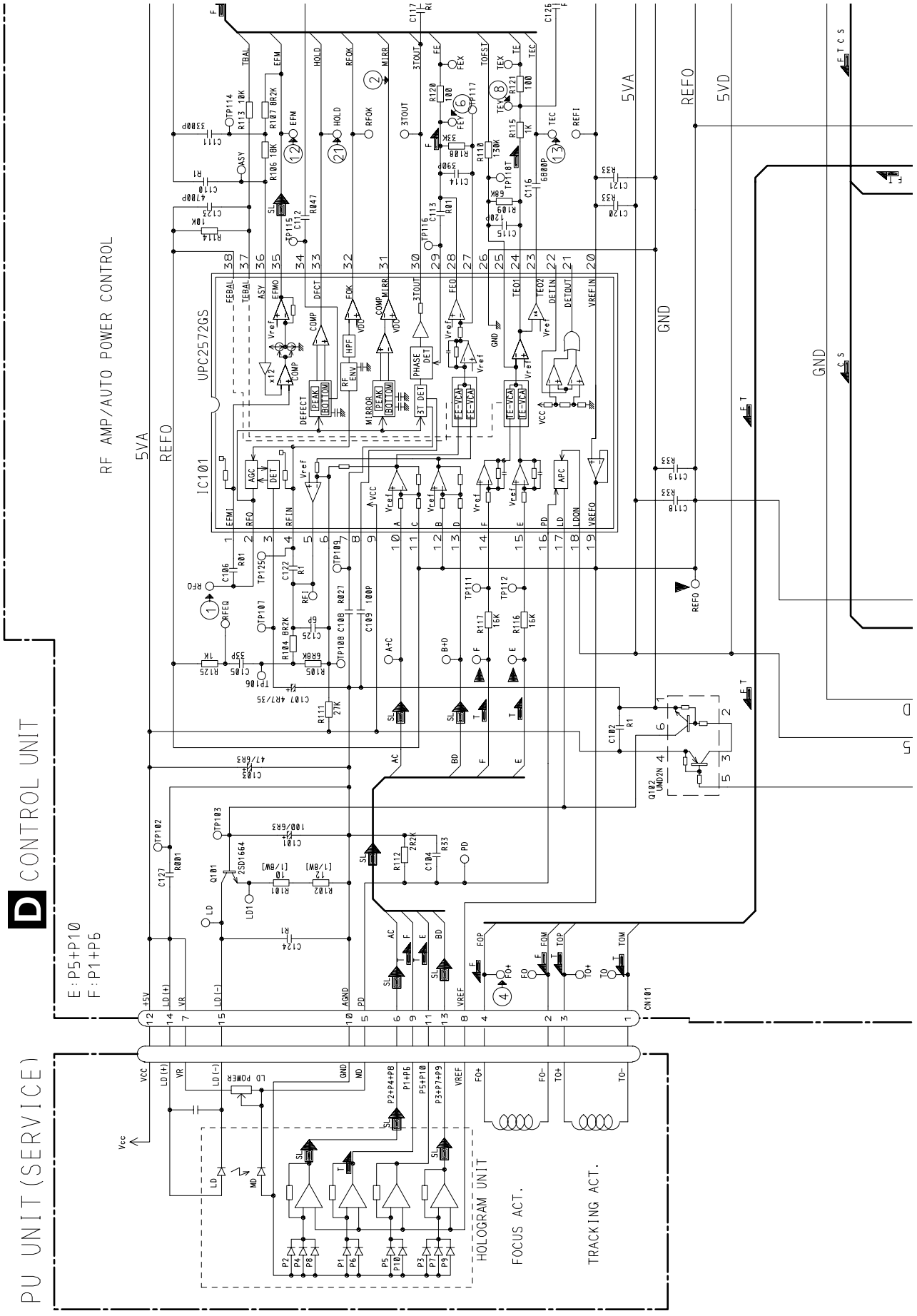
NOTE 1) GND ...CD LSI (AGND Analog, DGND Digital)
PGND ...Actuator, Motor Driver
AAGND ...Audio
These GND's are not connected to each other on PCB, though they use same symbols in this schematic.
PGND is connected to a chassis by a screw.

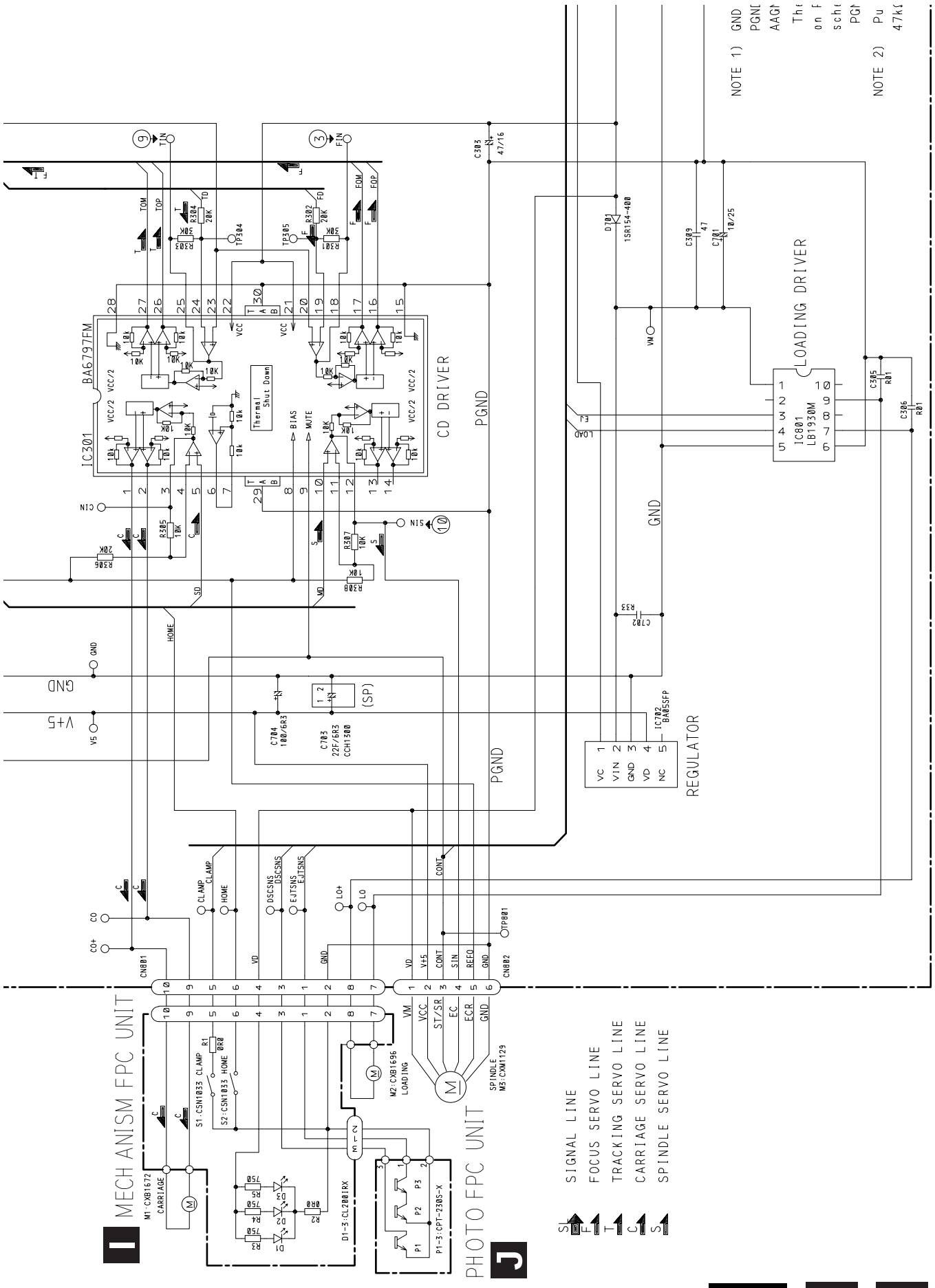
NOTE 2) Pull-up resistors of EJTSNS, DSCSNS should be 47kΩ.

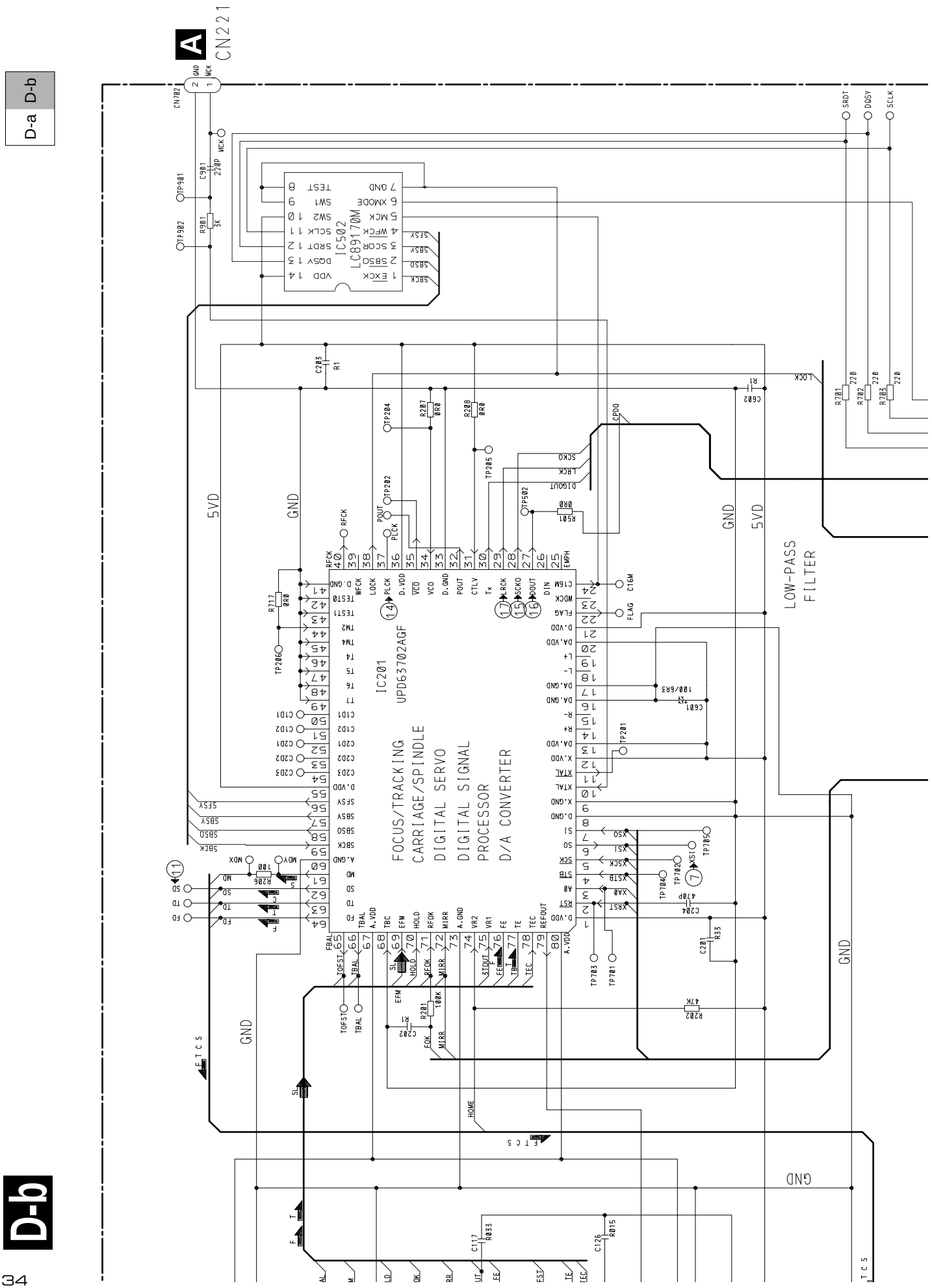
NOTE:
Symbol indicates a resistor.
No differentiation is made between chip resistors and discrete resistors.

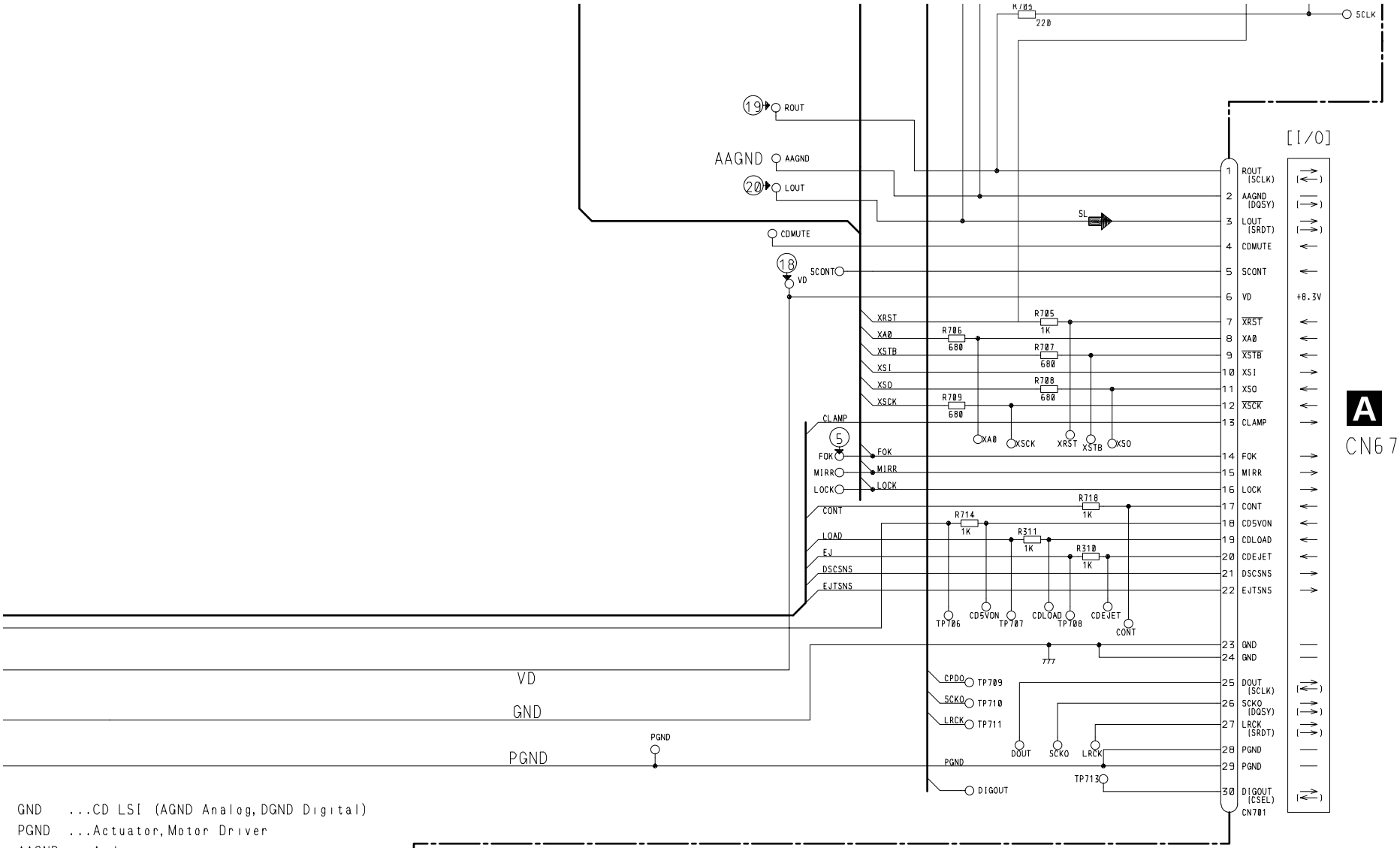
Symbol indicates a capacitor.
No differentiation is made between chip capacitors and discrete capacitors.

Decimal points for resistor and capacitor fixed values are expressed as:
2.2→2R2
0.022→R022


D-a D-b
RF AMP/AUTO POWER CONTROL
IC101
UPC2572GS
5VA
REFO
GND
5VD
D CONTROL UNIT
E:P5+P10
F:P1+P6
PU UNIT(SERVICE)
HOLOGRAM UNIT
FOCUS ACT.
TRACKING ACT.
CN101


D-a D-b
NOTE 1) GND PGND AAGND
NOTE 2) Pu 47k
IC301 BA6797FM
CD DRIVER
Thermal Shut Down
BIAS MUTE
PGND
GND
LOADING DRIVER
IC801 LB1930M
D701 1SR154-400
REGULATOR
IC702 BA05SFP
VC VIN GND VD NC
(SP)
C704 100/6R3
C703 22F/6R3 CCH1300
C303 47/16
C309 47
C701 10/25
C702
C305 R01
C306 R01
R305 10K
R306 20K
R307 10K
R308 10K
R302 20K
R304 20K
R301 20K
R303 20K
TP304
TP305
TP801
CN801
CN802
CIN
SIN
TIN
FIN
TOM
TOP
FOM
FOP
HOME
CLAMP
DSCSNS
EJTSNS
LO+
LO
CONT
VD
V+5
SIN
REFO
VM
VCC
ST/SR
EC
ECR
M1 CXB1672 CARRIAGE
S1 CSN1033 CLAMP
S2 CSN1033 HOME
M2 CXB1696 LOADING
SPINDLE M3 CXM1129
D1-3 CL280IRX
P1-3 CPT-230S-X
I MECHANISM FPC UNIT
J PHOTO FPC UNIT
SIGNAL LINE
FOCUS SERVO LINE
TRACKING SERVO LINE
CARRIAGE SERVO LINE
SPINDLE SERVO LINE


A
CN221
D-a D-b
IC201
UPD63702AGF
FOCUS/TRACKING
CARRIAGE/SPINDLE
DIGITAL SERVO
DIGITAL SIGNAL
PROCESSOR
D/A CONVERTER
IC502
LC89170M
5VD
GND
LOW-PASS
FILTER
HOME
D-b



GND ...CD LSI (AGND Analog, DGND Digital)
PGND ...Actuator, Motor Driver
AAGND ...Audio

These GND's are not connected to each other on PCB, though they use same symbols in this schematic.

PGND is connected to a chassis by a screw.

Pull-up resistors of EJTSNS, DSCSNS should be 47kΩ.

NOTE:

Symbol indicates a resistor.
No differentiation is made between chip resistors and discrete resistors.

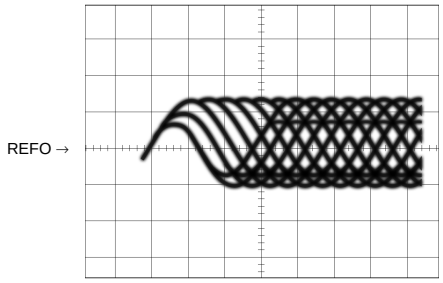
Symbol indicates a capacitor.
No differentiation is made between chip capacitors and discrete capacitors.

Decimal points for resistor and capacitor fixed values are expressed as:
2.2→2R2
0.022→R022

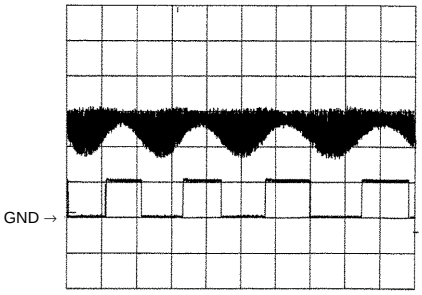
Note:1. The encircled numbers denote measuring pointes in the circuit diagram.
2. Reference voltage
REFO:2.5V

● Waveforms

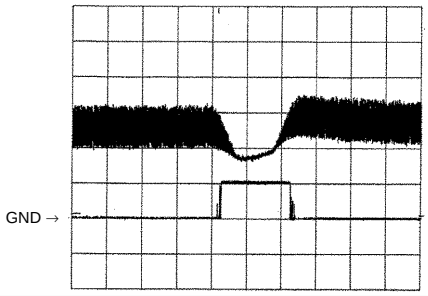
① RFO 0.5V/div. 0.5µs/div.
Normal mode: play



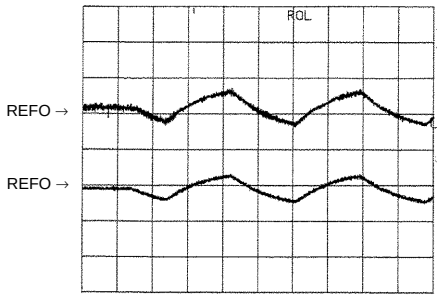
① CH1: RFO 1V/div. 0.5ms/div.
② CH2: MIRR 5V/div.
Test mode: Tracking open



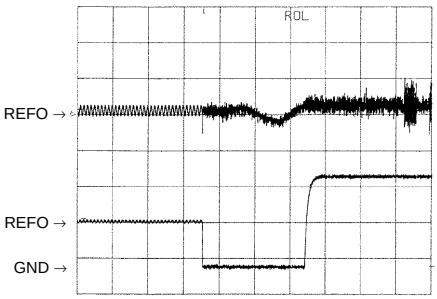
① CH1: RFO 1V/div. 0.5ms/div.
② CH2: MIRR 5V/div.
Normal mode: The defect part passes 800µm



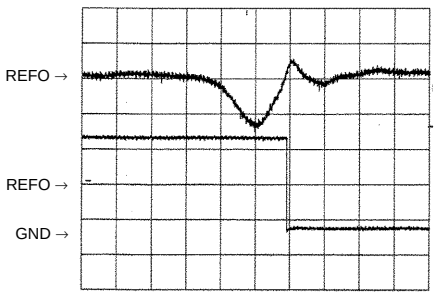
③ CH1: FIN 0.5V/div. 0.2s/div.
④ CH2: FO+ 2V/div.
Test mode: No disc, Focus close



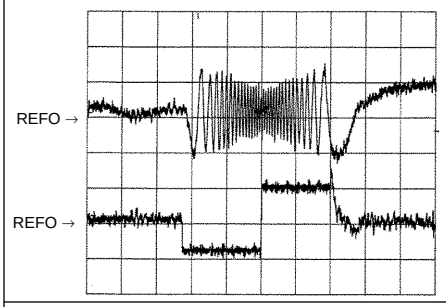
③ CH1: FIN 0.5V/div. 0.2s/div.
⑤ CH2: FOK 2V/div.
Normal mode: Focus close



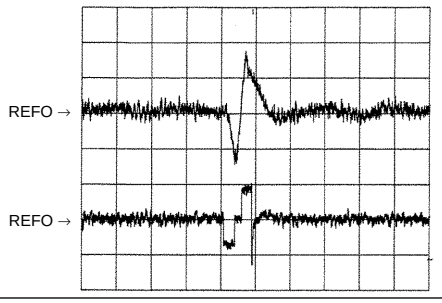
⑥ CH1: FEY 0.5V/div. 1ms/div.
⑦ CH2: XSI 2V/div.
Normal mode: Focus close



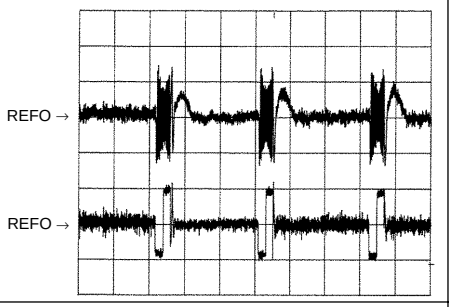
⑧ CH1: TEY 0.5V/div. 0.5ms/div.
⑨ CH2: TIN 0.5V/div.
Test mode: 32 tracks jump (FWD)



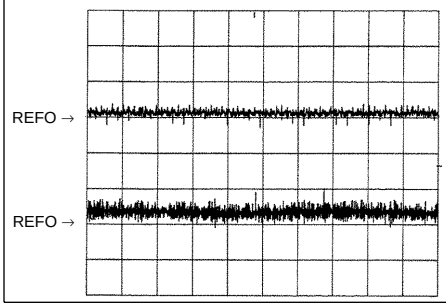
⑧ CH1: TEY 0.5V/div. 0.5ms/div.
⑨ CH2: TIN 0.5V/div.
Test mode: Single jump (FWD)



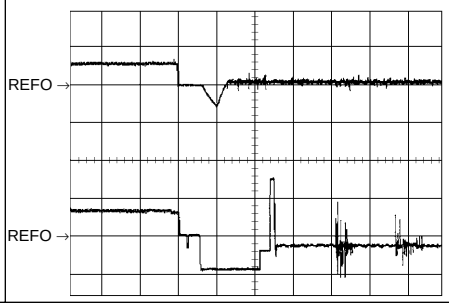
⑧ CH1: TEY 0.5V/div. 5ms/div.
⑨ CH2: TIN 0.5V/div.
Test mode: 100 tracks jump (FWD)



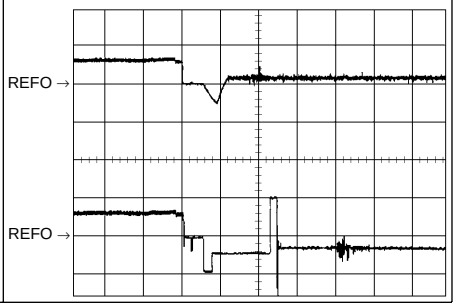
⑥ CH1: FEY 0.1V/div. 20ms/div.
③ CH2: FIN 0.2V/div.
Normal mode: Play



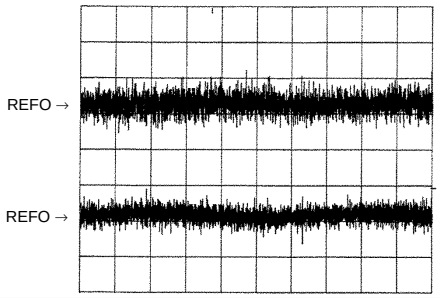
③ CH1: FIN 0.5V/div. 0.5s/div.
⑩ CH2: SIN 1V/div.
Normal mode: Focus close (12cm)



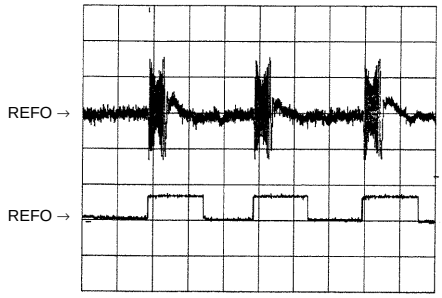
③ CH1: FIN 0.5V/div. 0.5s/div.
⑩ CH2: SIN 1V/div.
Normal mode: Focus close (8cm)



⑧ CH1: TEY 0.2V/div. 20ms/div.
⑨ CH2: TIN 0.2V/div.
Normal mode: play

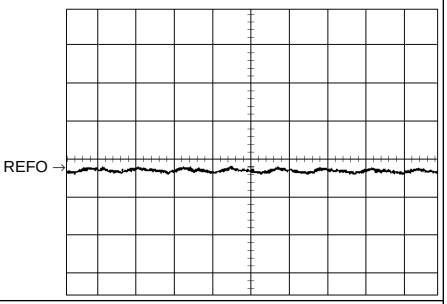


⑧ CH1: TEY 0.5V/div. 5ms/div.
⑪ CH2: SD 0.5V/div.



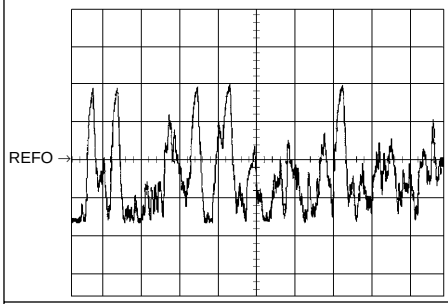
⑩ SIN 0.5V/div. 0.1s/div.

Normal mode: Play (12cm)



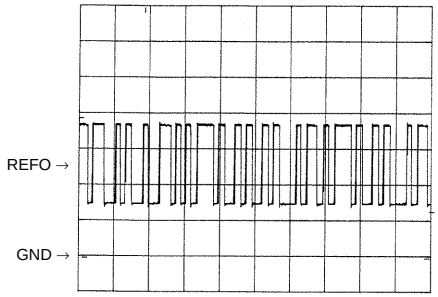
⑩ SIN 1V/div. 10ms/div.

Long Search (12cm)

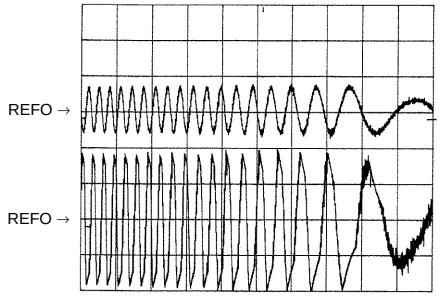


⑫ EFM 1V/div. 5µs/div.

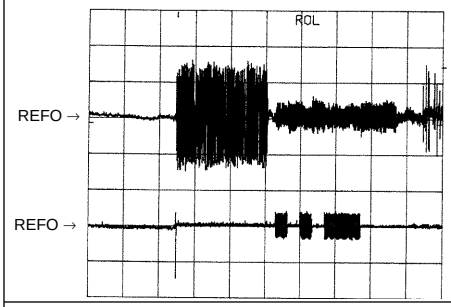
Play



⑧ CH1: TEY 1V/div. 2ms/div.
⑬ CH2: TEC 1V/div.
Test mode: Focus close
Tracking open

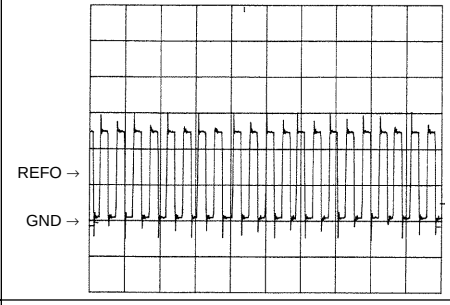


⑧ CH1: TEY 0.5V/div. 0.2s/div.
⑥ CH2: FEY 0.5V/div.
Normal mode: AGC after focus close



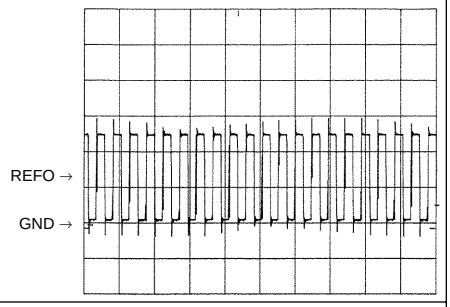
⑭ PLCK 2V/div. 0.5µs/div.

Play



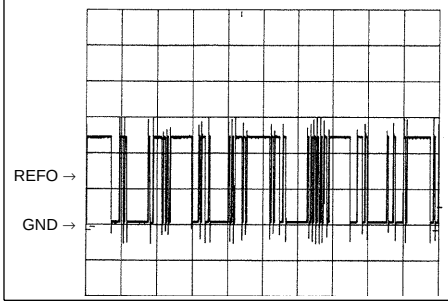
⑮ SCKO 2V/div. 1µs/div.

Play

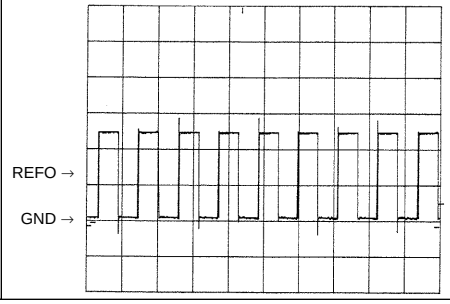


⑯ Dout 2V/div. 10µs/div.

Play

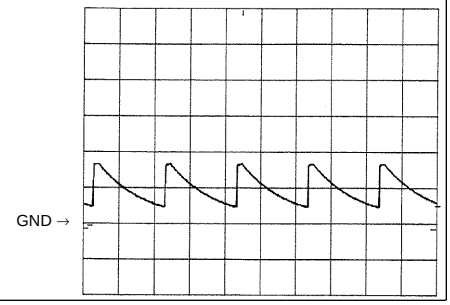


⑰ LRCK 2V/div. 20µs/div.

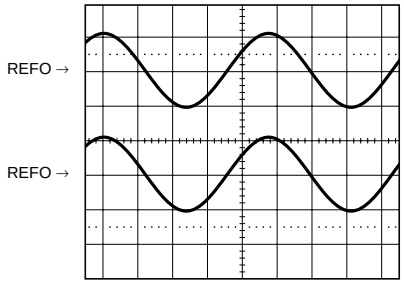


⑱ VD 5V/div. 50ms/div.

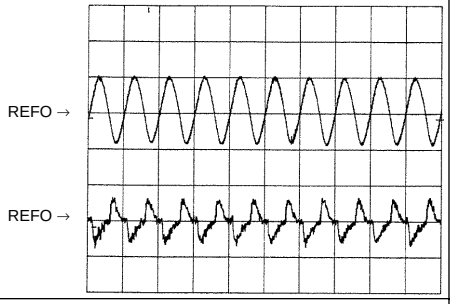
Normal mode: No disc



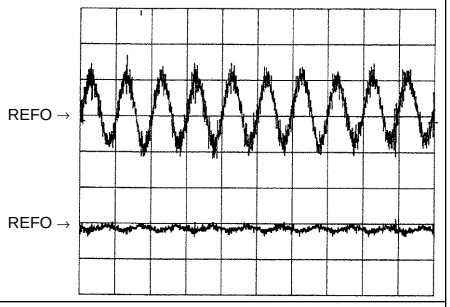
⑲ CH1: R OUT 1V/div.
⑳ CH2: L OUT 1V/div.
0.2ms/div.
Normal mode: Play (1kHz 0dB)



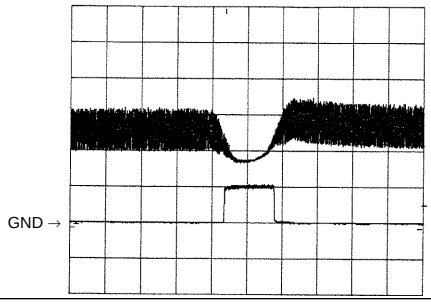
⑥ CH1: FEY 0.2V/div.
③ CH2: FIN 0.5V/div.
1ms/div.
Normal mode: During AGC



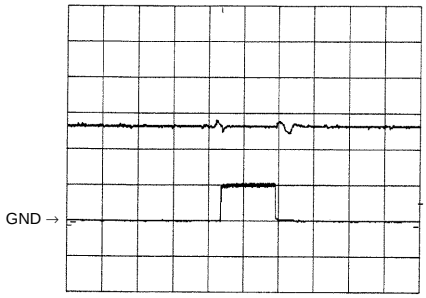
⑧ CH1: TEY 0.2V/div.
⑨ CH2: TIN 0.5V/div.
1ms/div.
Normal mode: During AGC



① CH1: RFO 1V/div.
㉑ CH2: HOLD 5V/div.
0.5ms/div.
Normal mode: The defect part passes 800µm

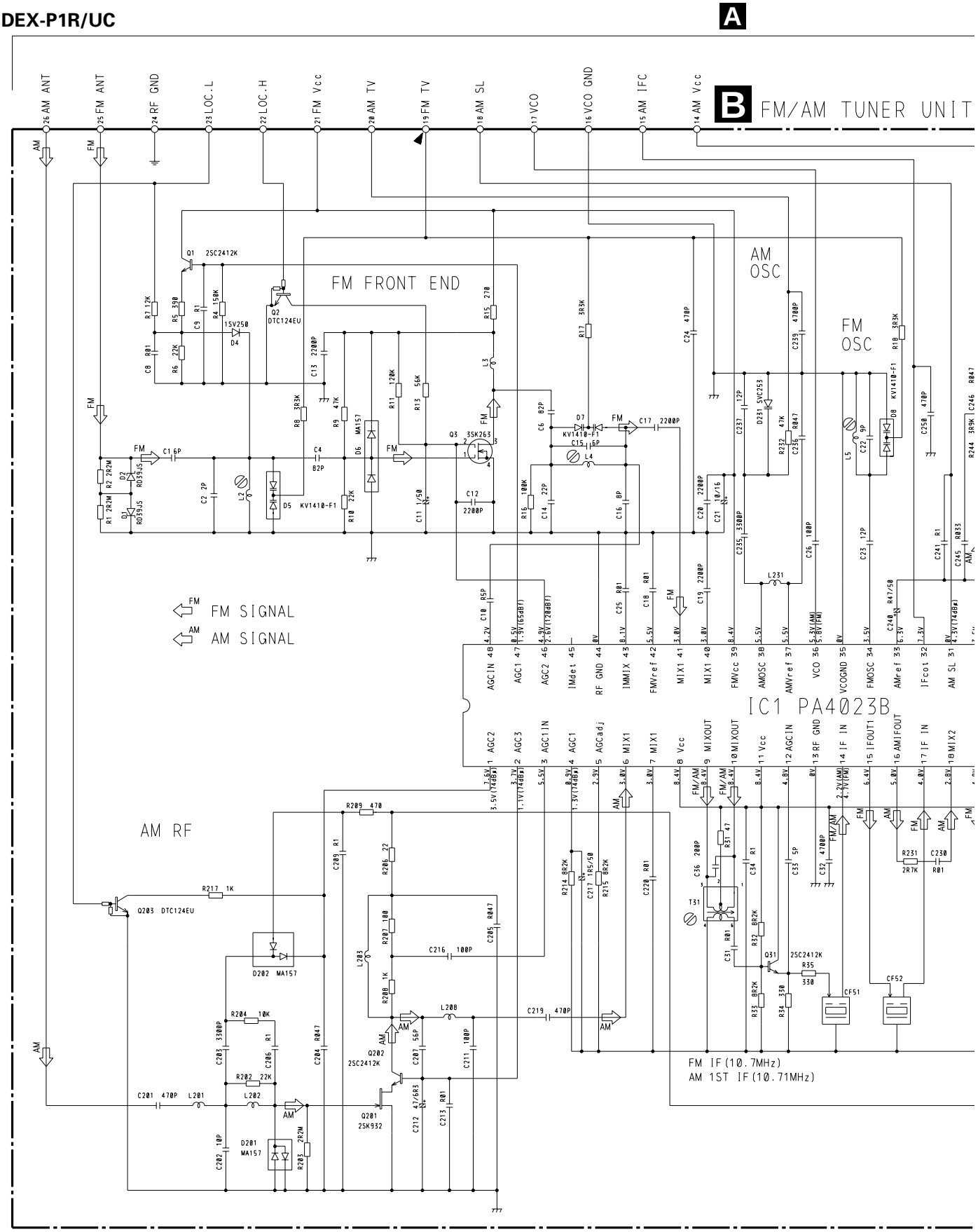


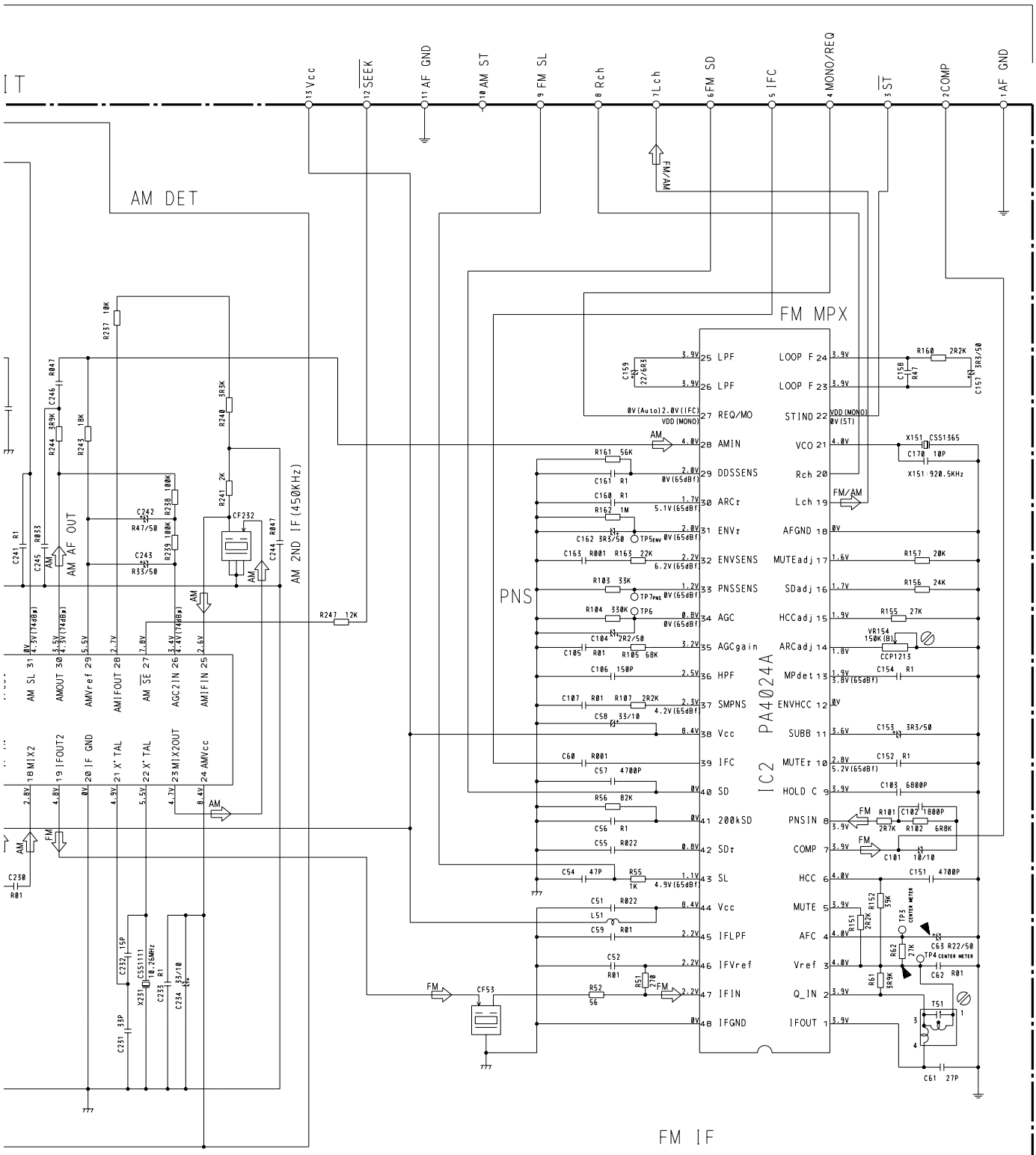
③ CH1: FIN 1V/div.
㉑ CH2: HOLD 5V/div.
0.5ms/div.
Normal mode: The defect part passes 800µm



3.3 FM/AM TUNER UNIT

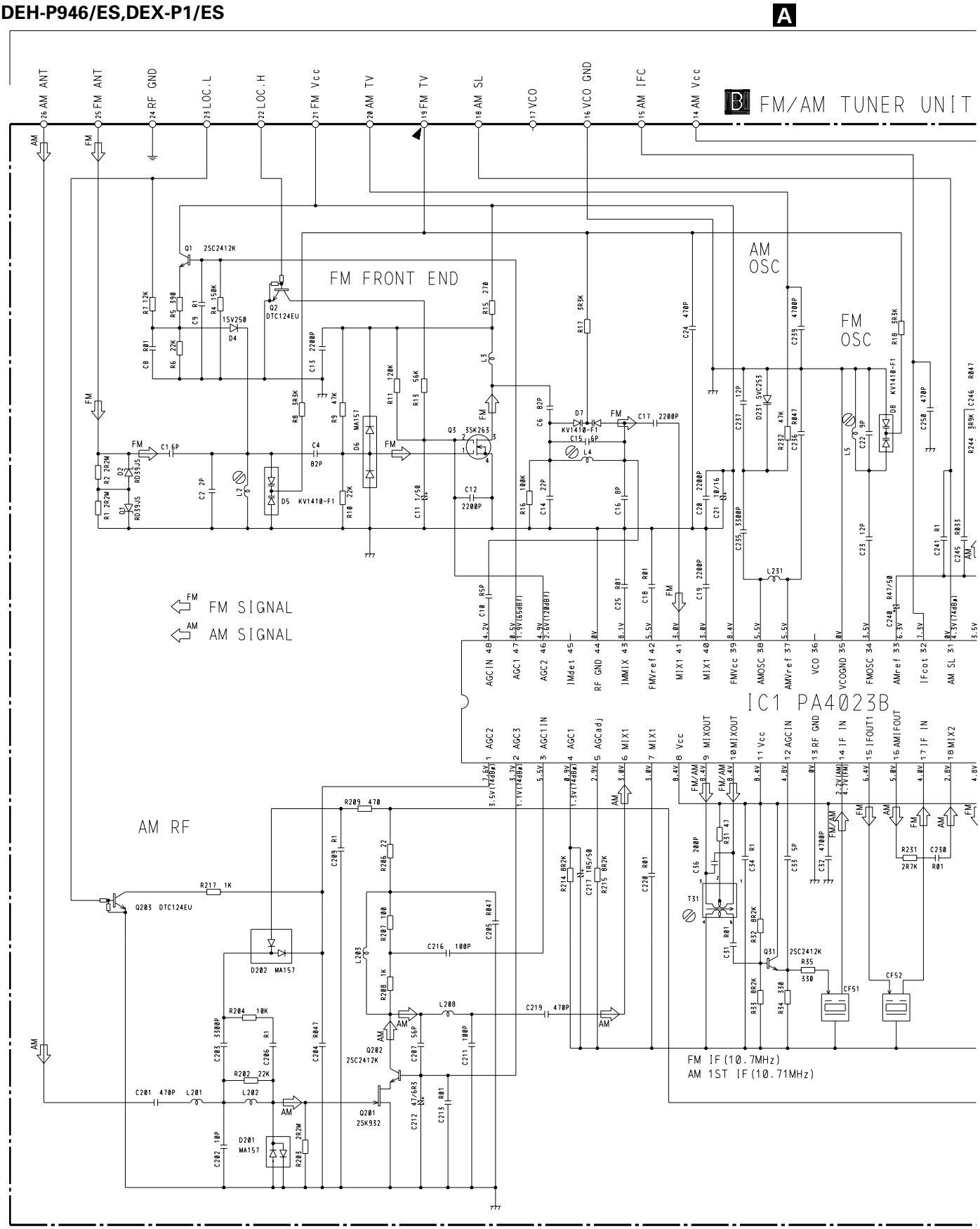
● **DEX-P1R/UC**

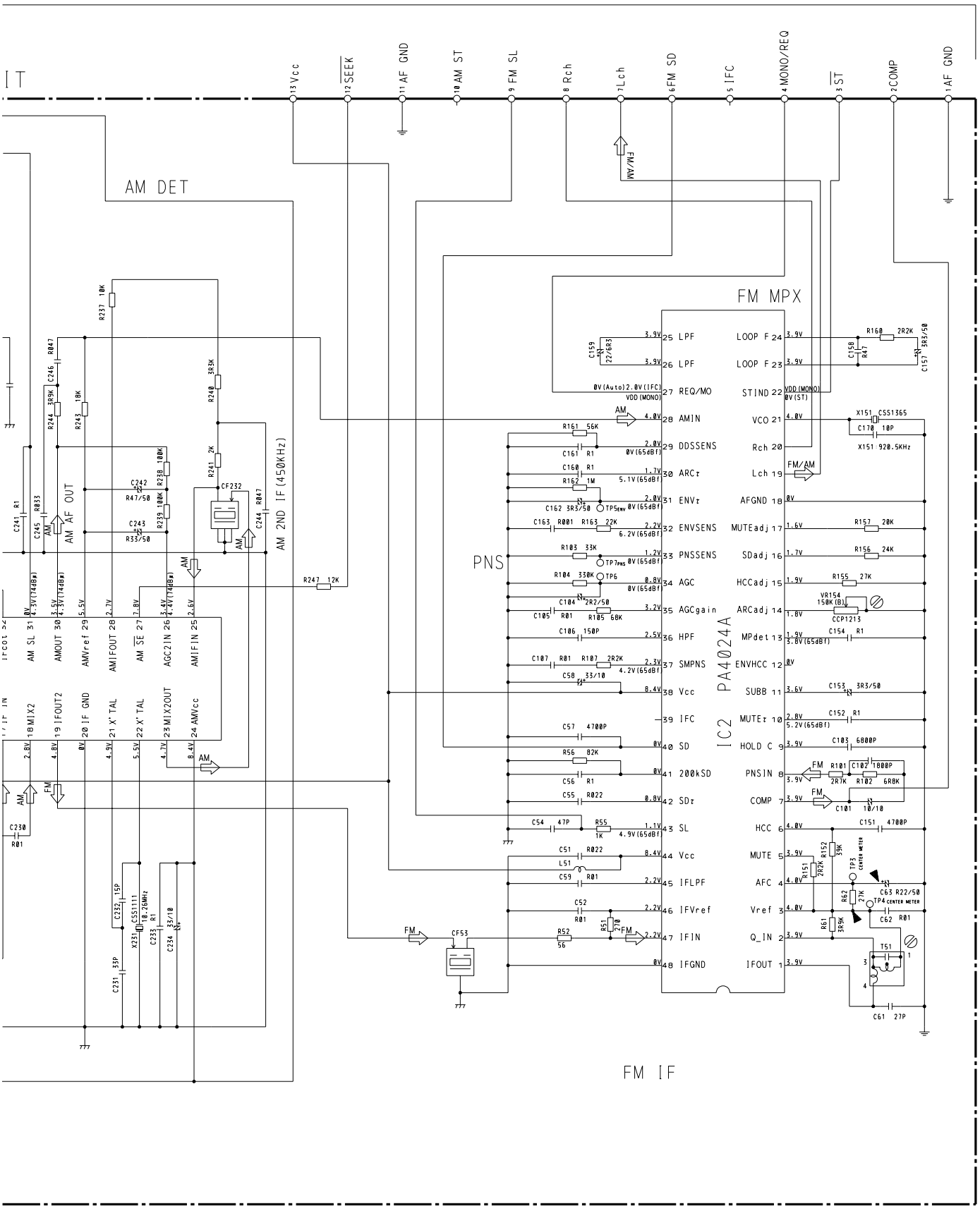



AM DET
FM MPX
PNS
IC2 PA4024A
FM IF
AM AF OUT
AM 2ND IF (450KHz)
FM/AM
13 Vcc
12 SEEK
11 AF GND
10 AM ST
9 FM SL
8 Rch
7 Lch
6 FM SD
5 IFC
4 MONO/REQ
3 ST
2 COMP
1 AF GND
25 LPF
26 LPF
27 REQ/MO
28 AMIN
29 DDSSENS
30 ARCτ
31 ENVτ
32 ENVSENS
33 PNSSENS
34 AGC
35 AGCgain
36 HPF
37 SMPNS
38 Vcc
39 IFC
40 SD
41 200kSD
42 SDτ
43 SL
44 Vcc
45 IFLPF
46 IFVref
47 IFIN
48 IFGND
24 LOOP F
23 LOOP F
22 STIND
21 VCO
20 Rch
19 Lch
18 AFGND
17 MUTEadj
16 SDadj
15 HCCadj
14 ARCadj
13 MPdet
12 ENVHCC
11 SUBB
10 MUTEτ
9 HOLD C
8 PNSIN
7 COMP
6 HCC
5 MUTE
4 AFC
3 Vref
2 Q_IN
1 IFOUT
31 AM SL
30 AMOUT
29 AMVref
28 AMIFOUT
27 AM SE
26 AGC2IN
25 AMIFIN
18 MIX2
19 IFOUT2
20 IF GND
21 X'TAL
22 X'TAL
23 MIX2OUT
24 AMVcc
X151 CSS1365
X151 920.5KHz
X231 CSS1111 10.26MHz
CF232
CF53
TP5Env
TP7PNS
TP6
TP3 CENTER METER
TP4 CENTER METER
VR154 150K(B)
T51

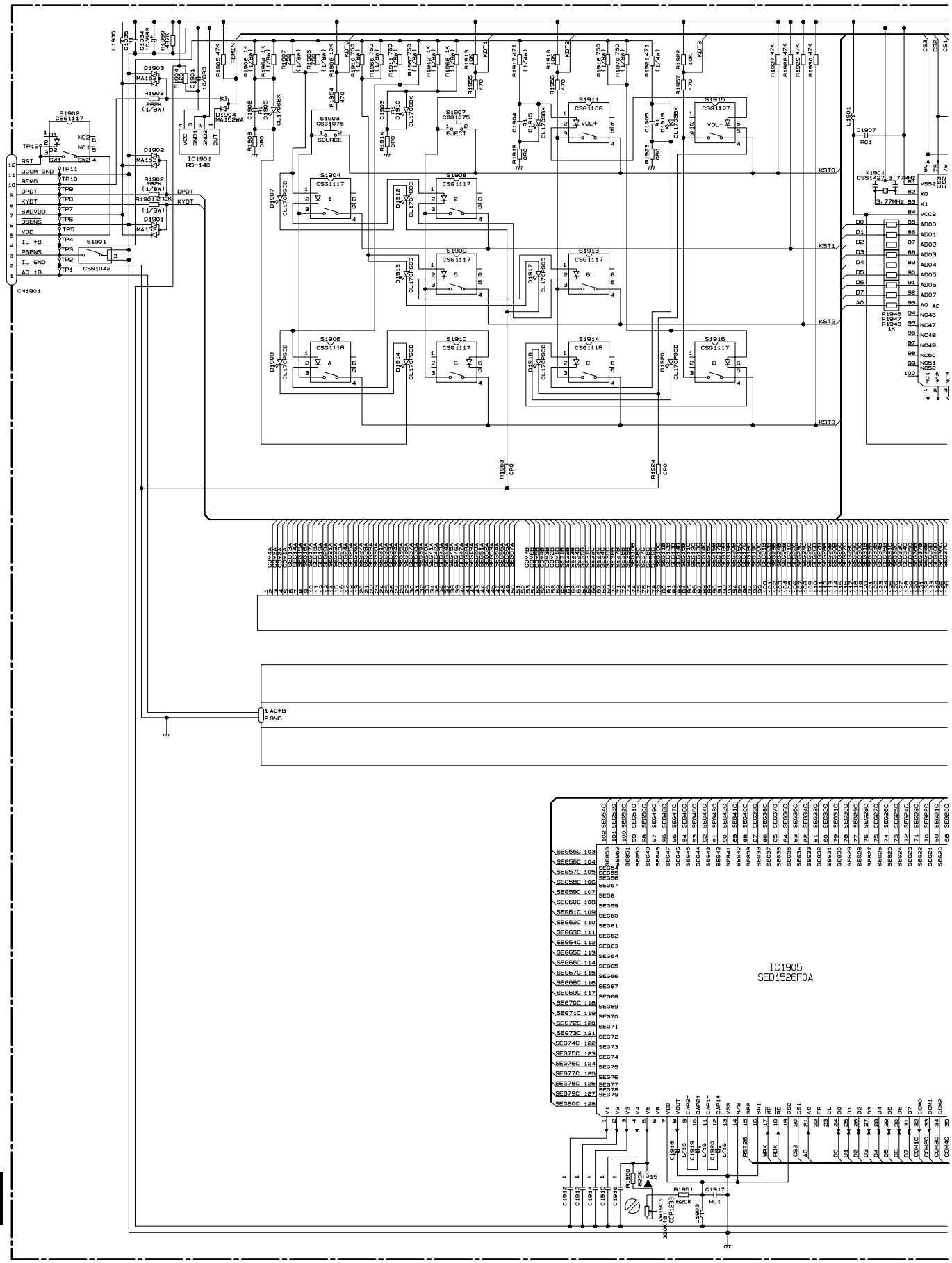
3.4 FM/AM TUNER UNIT

● **DEH-P946/ES,DEX-P1/ES**

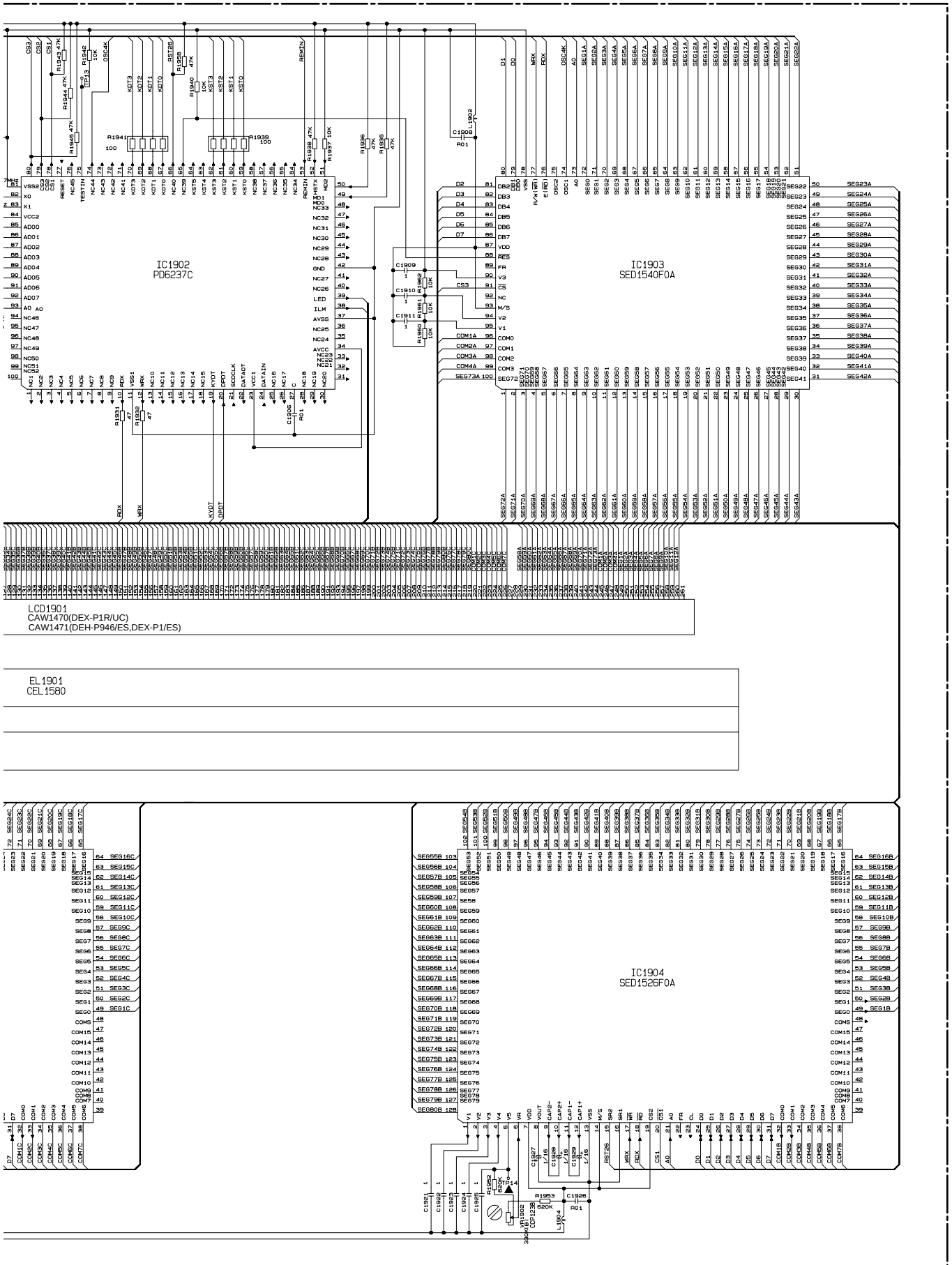



AM DET
FM MPX
PNS
IC2 PA4024A
FM IF
AM 2ND IF (450KHz)
AM AF OUT
13 Vcc
12 SEEK
11 AF GND
10 AM ST
9 FM SL
8 Rch
7 Lch
6 FM SD
5 IFC
4 MONO/REQ
3 ST
2 COMP
1 AF GND
FM/AM
25 LPF
26 LPF
27 REQ/MO
28 AMIN
29 DDSSENS
30 ARCτ
31 ENVτ
32 ENVSENS
33 PNSSENS
34 AGC
35 AGCgain
36 HPF
37 SMPNS
38 Vcc
39 IFC
40 SD
41 200kSD
42 SDτ
43 SL
44 Vcc
45 IFLPF
46 IFVref
47 IFIN
48 IFGND
24 LOOP F
23 LOOP F
22 STIND
21 VCO
20 Rch
19 Lch
18 AFGND
17 MUTEadj
16 SDadj
15 HCCadj
14 ARCadj
13 MPdet
12 ENVHCC
11 SUBB
10 MUTEτ
9 HOLD C
8 PNSIN
7 COMP
6 HCC
5 MUTE
4 AFC
3 Vref
2 Q_IN
1 IFOUT
X151 CSS1365
X151 920.5KHz
CF232
CF53
X251 CSS1111 10.26MHz
TP3 CENTER METER
TP4 CENTER METER
T51

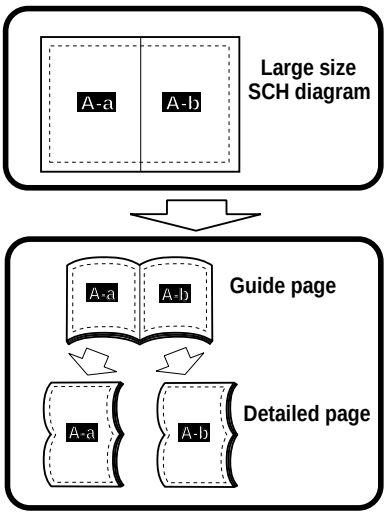
3.5 KEYBOARD PCB



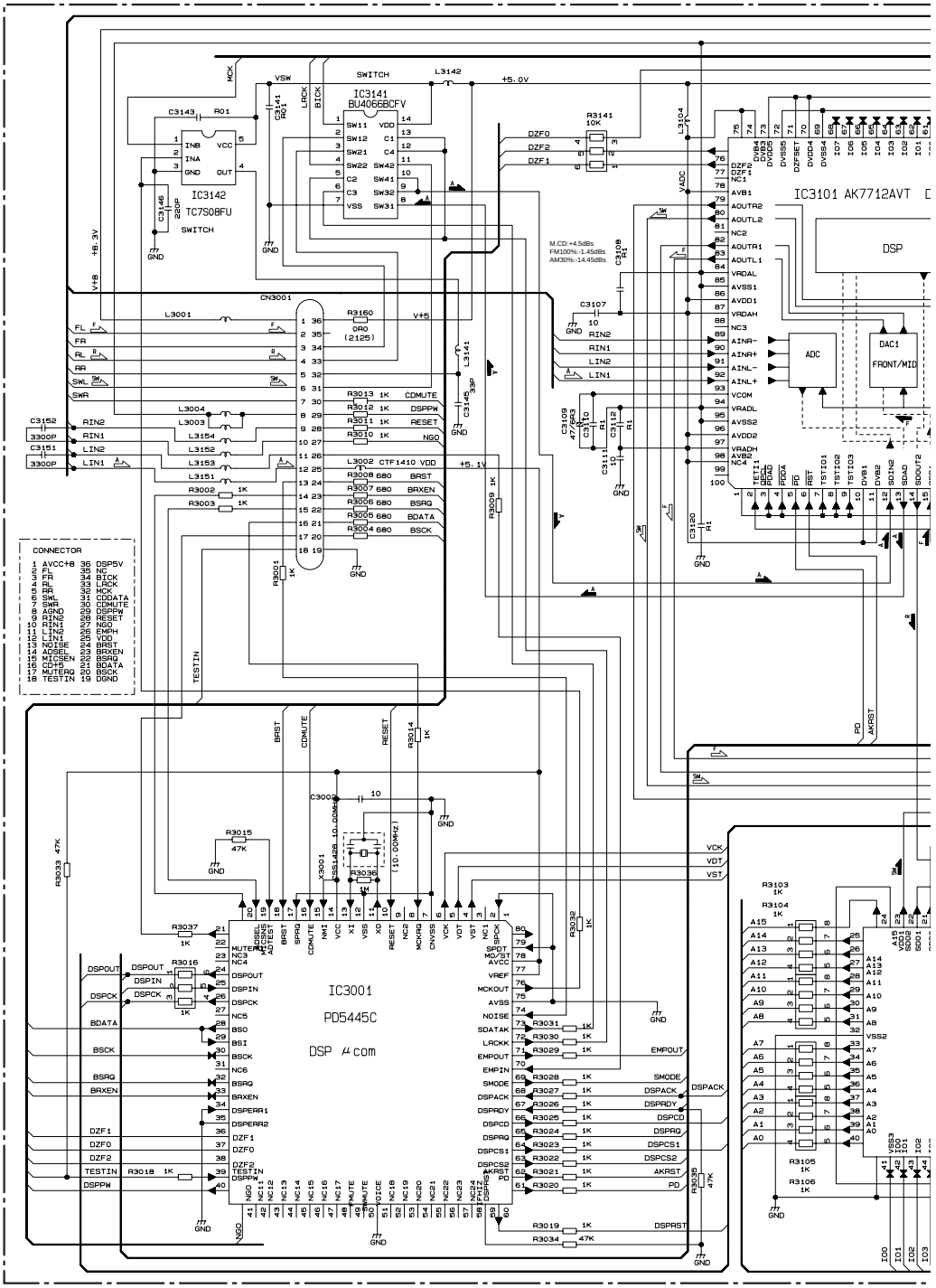
C KEYBOARD UNIT



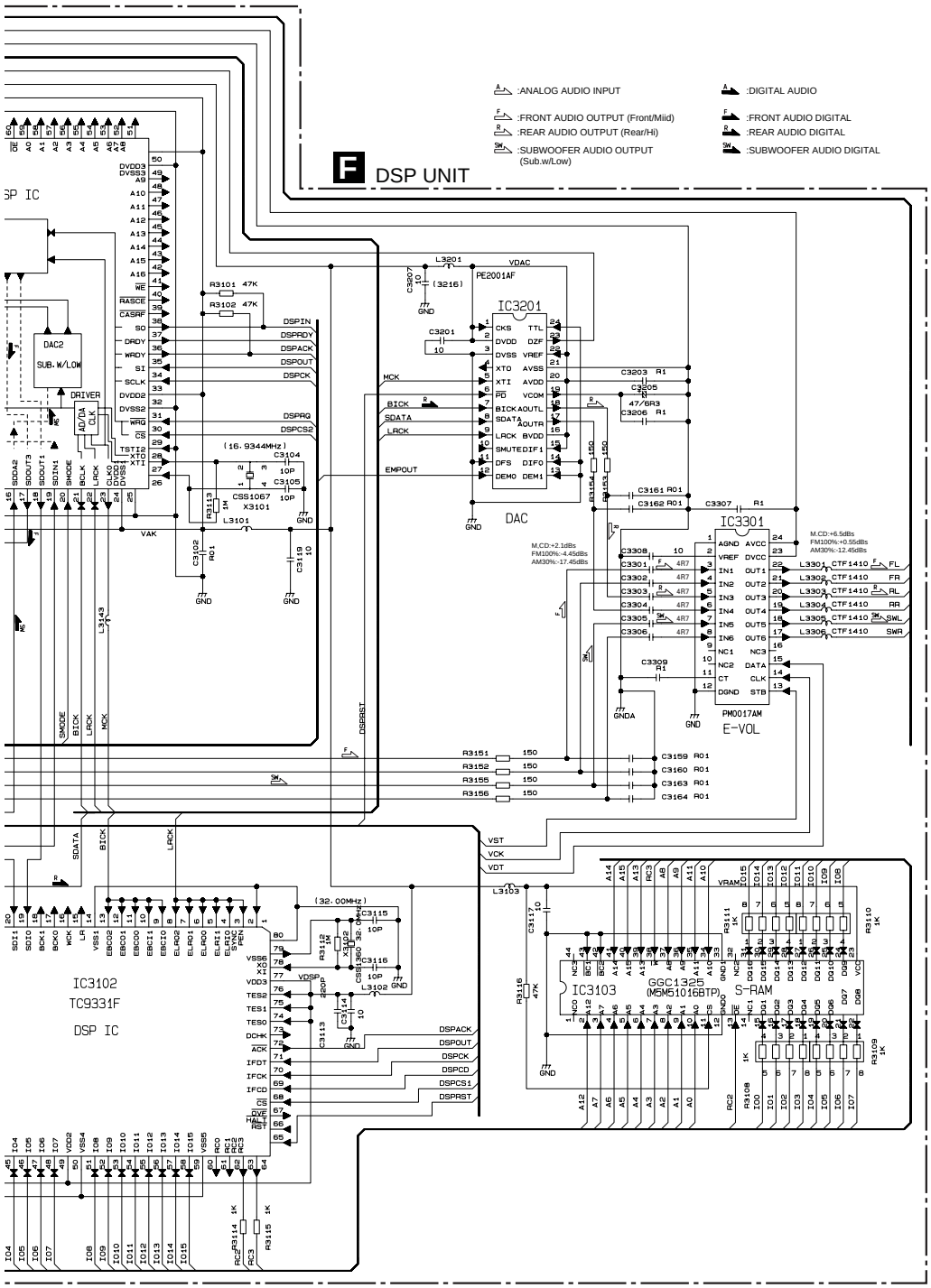
3.6 DSP UNIT(GUIDE PAGE)

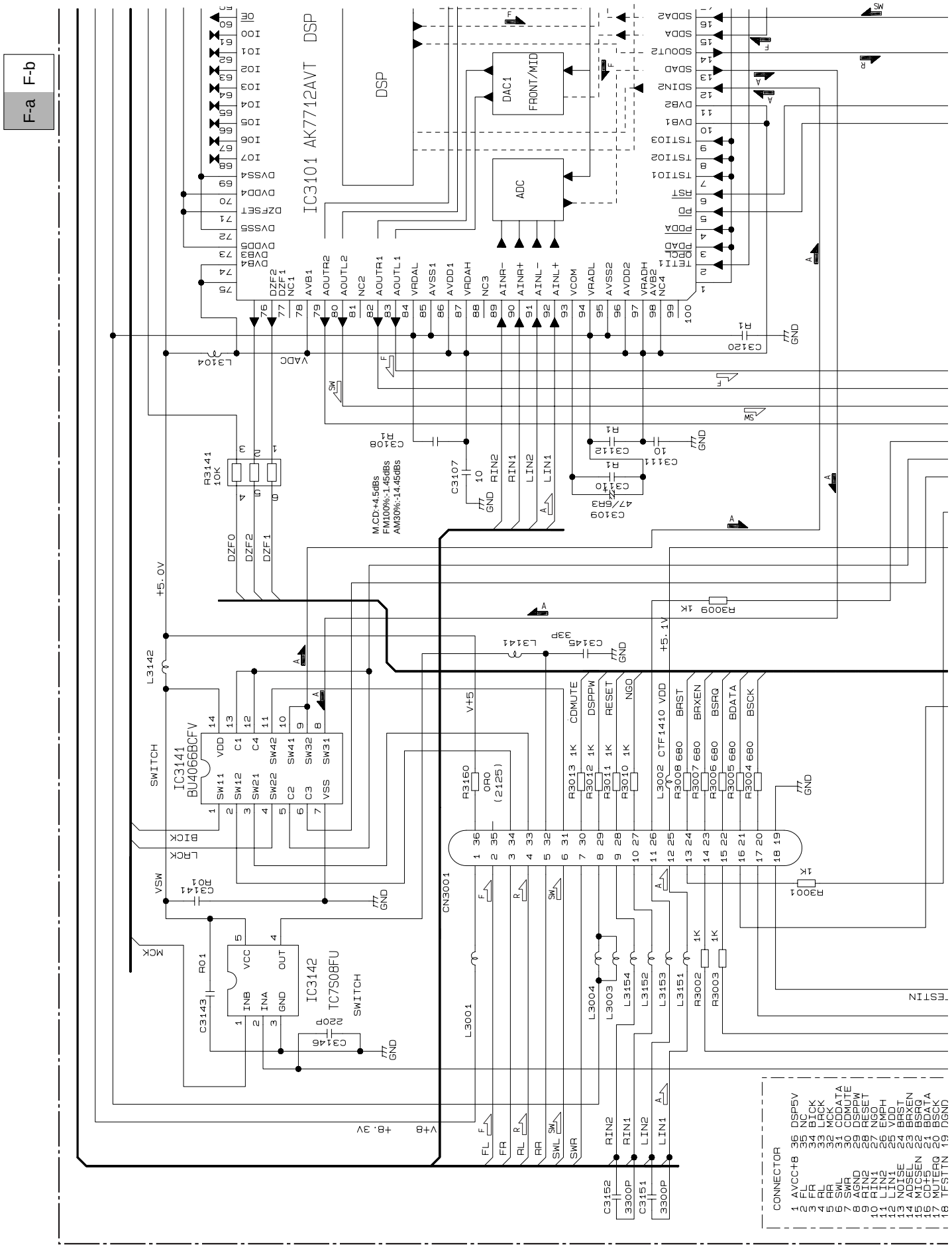


F-a



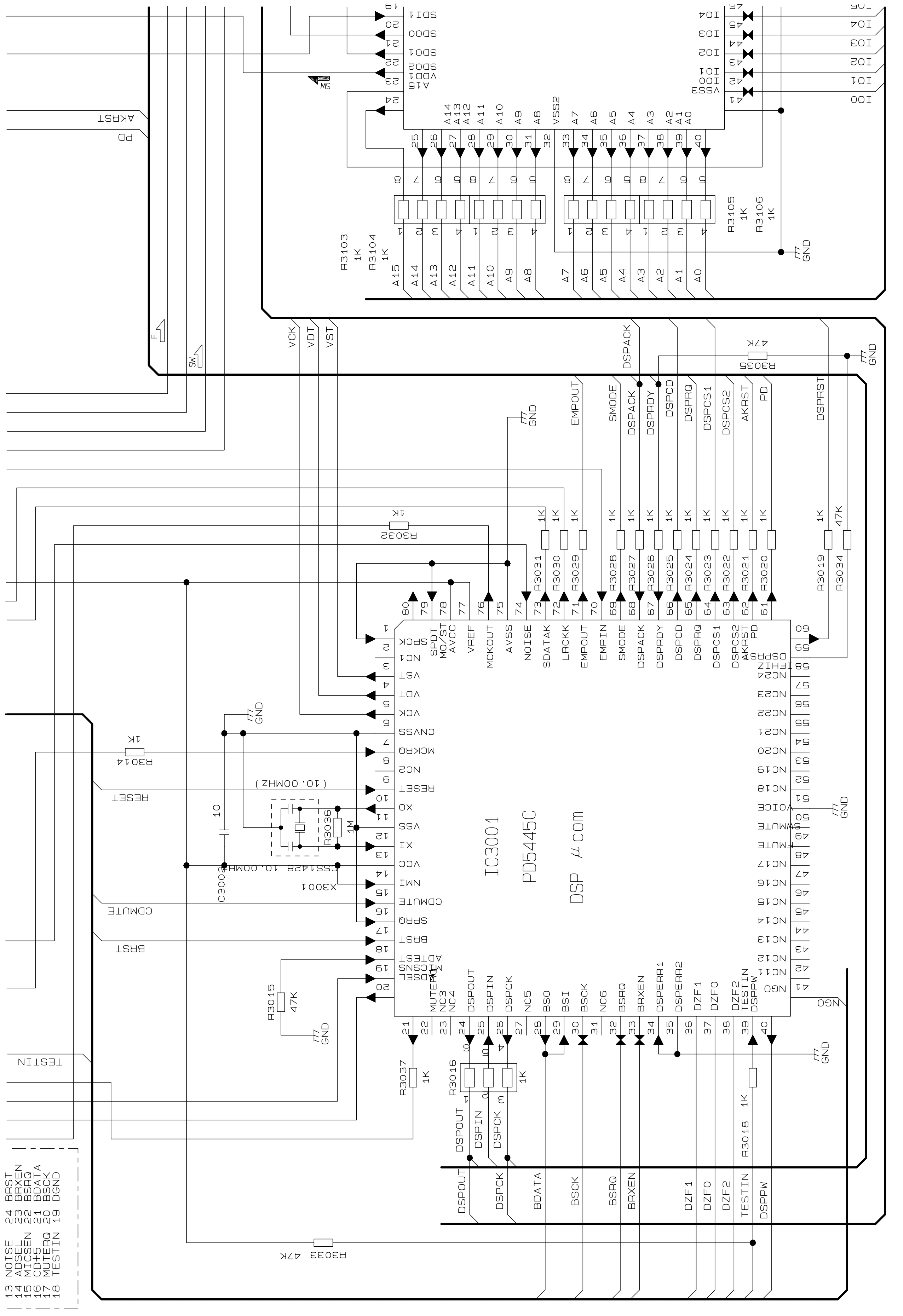
F-b


:ANALOG AUDIO INPUT
:FRONT AUDIO OUTPUT (Front/Miid)
:REAR AUDIO OUTPUT (Rear/Hi)
:SUBWOOFER AUDIO OUTPUT (Sub.w/Low)
:DIGITAL AUDIO
:FRONT AUDIO DIGITAL
:REAR AUDIO DIGITAL
:SUBWOOFER AUDIO DIGITAL
F DSP UNIT
DSP IC
IC3102
TC9331F
DSP IC
IC3201
PE2001AF
DAC
IC3301
PM0017AM
E-VOL
IC3103
GGC13325
(M5M51016BTP)
S-RAM
DAC2
SUB.W/LOW
DRIVER
(16.9344MHz)
CSS1067
X3101
(32.00MHz)
VDAC
DSPIN
DSPRDY
DSPACK
DSPOUT
DSPCK
DSPCS1
DSPRST
MCK
BICK
SDATA
LRCK
EMPOUT
VST
VCK
VDT
VRAM
FL
FR
RL
RR
SWL
SWR


F-a F-b
IC3101 AK7712AVT DSP
DSP
DAC1
FRONT/MID
ADC
IC3141 BU4066BCFV
SWITCH
IC3142 TC7S08FU
SWITCH
CN3001
CONNECTOR
1 AVCC+8
2 FR
3 FR
4 RL
5 RR
6 SWL
7 SWR
8 AGND
9 RIN2
10 RIN1
11 LIN2
12 LIN1
13 NOISE
14 ADSEL
15 MICSEN
16 CDTS
17 MUTERQ
18 TFSTTN
19 DGND
20 BSCK
21 BDATA
22 BSRQ
23 BRXEN
24 BRST
25 VDD
26 EMPH
27 NGO
28 RESET
29 DSPPW
30 CDMUTE
31 CDDATA
32 MCK
33 LRCK
34 BICK
35 NC
36 DSP5V
+5.0V
+5.1V
+8.3V
V+8
V+5
VADC
VSW
MCK
BICK
LRCK
DZF0
DZF1
DZF2
RIN1
RIN2
LIN1
LIN2
FL
FR
RL
RR
SWL
SWR
TESTIN
M.CD-+4.5dBs
FM100%-1.45dBs
AM30%-14.45dBs

F-a F-b

A

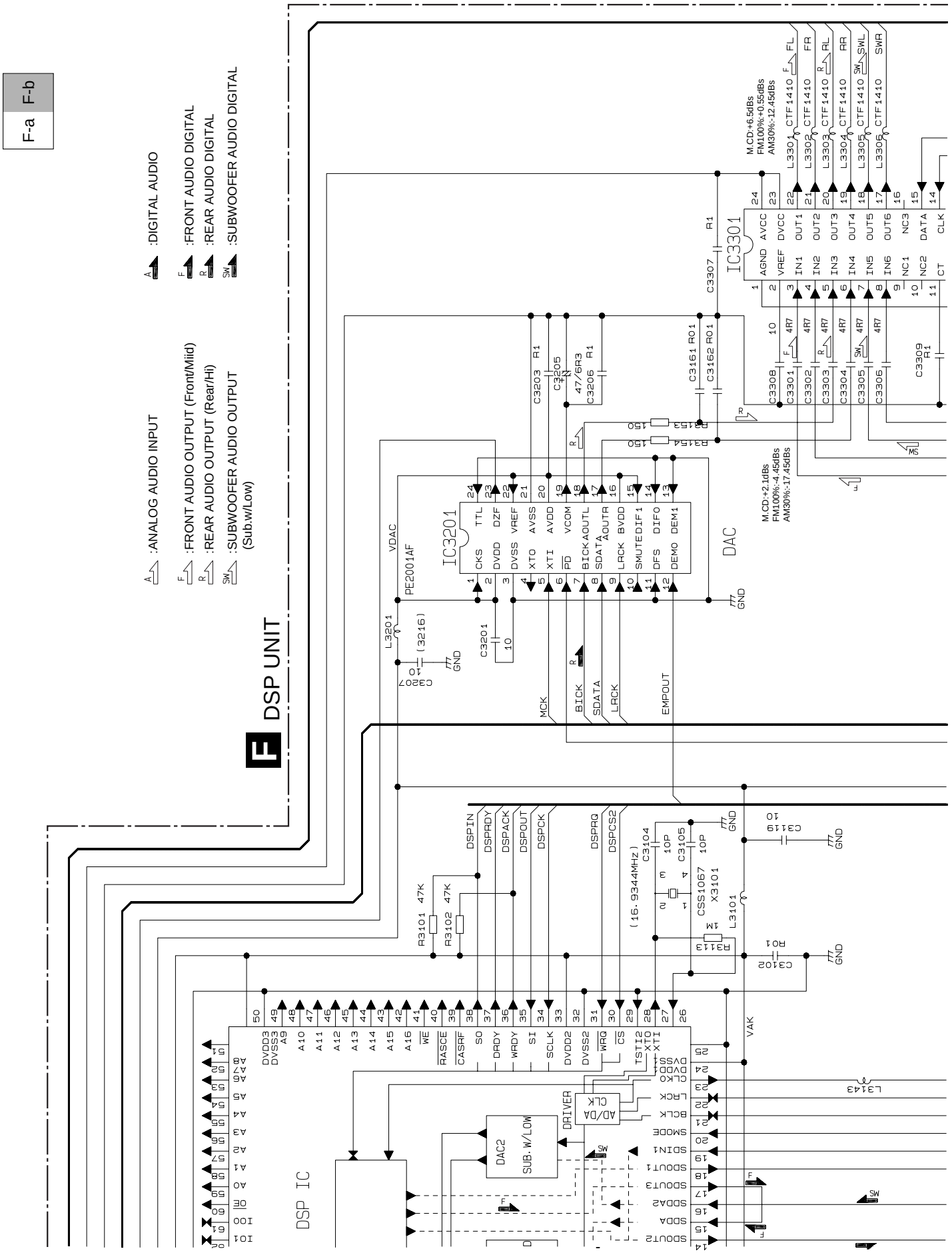

IC3001
PD5445C
DSP μcom
X3001
CSS1428 10.00MHz
R3014 1K
R3015 47K
R3016 1K
R3018 1K
R3032 1K
R3033 47K
R3035 47K
R3036 1M
R3037 1K
C3002 10
GND

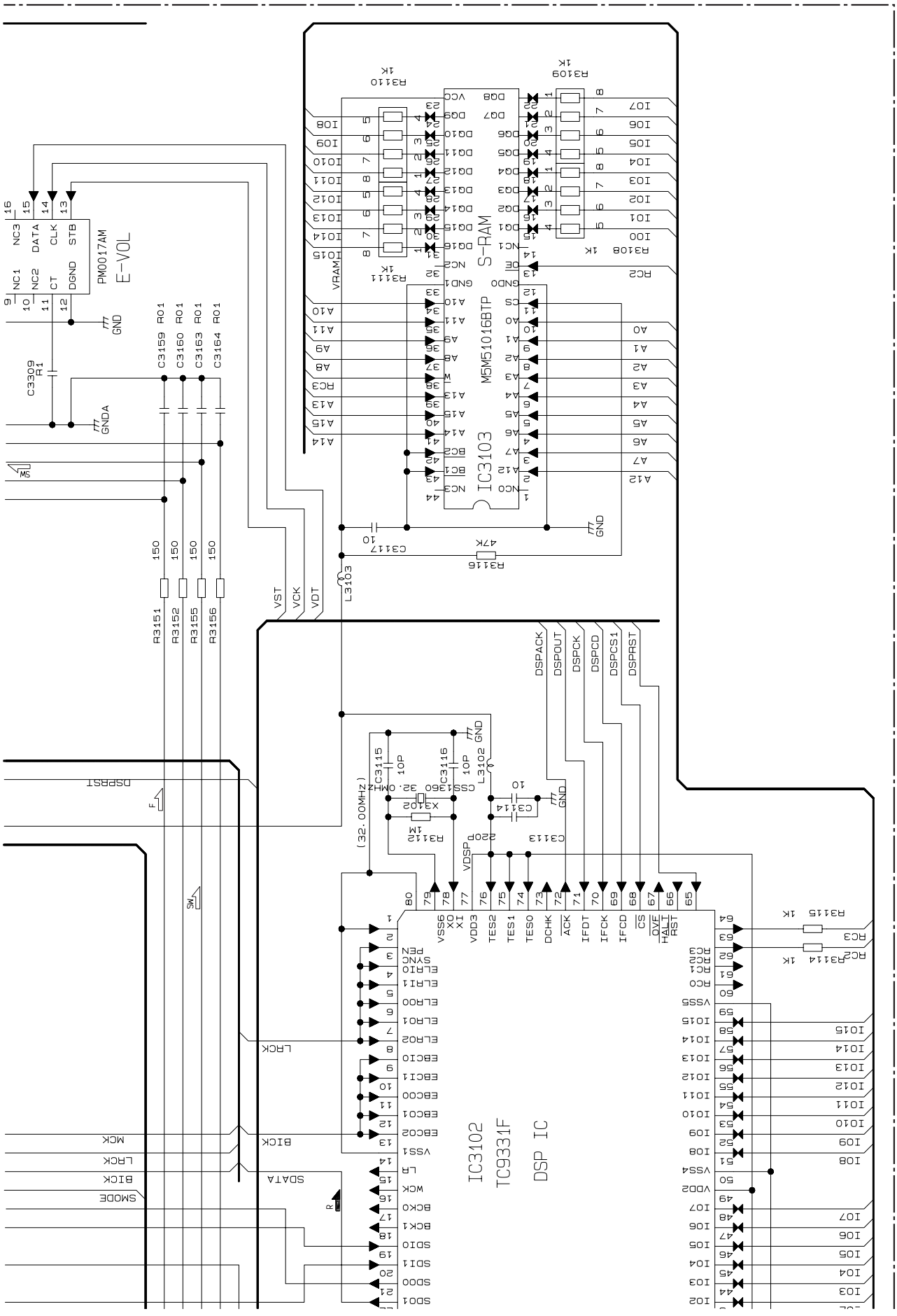
B

C

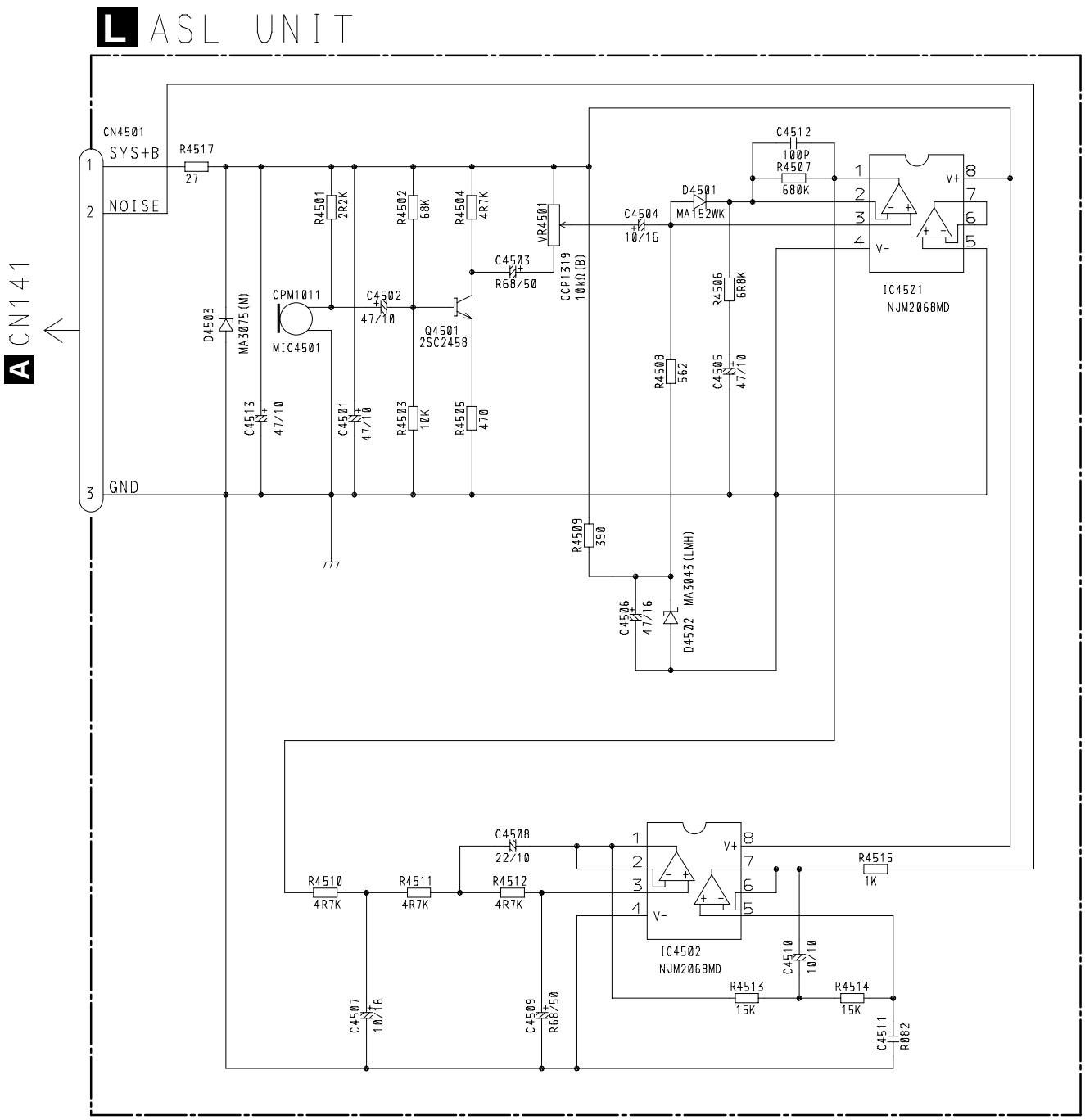
D

F-a

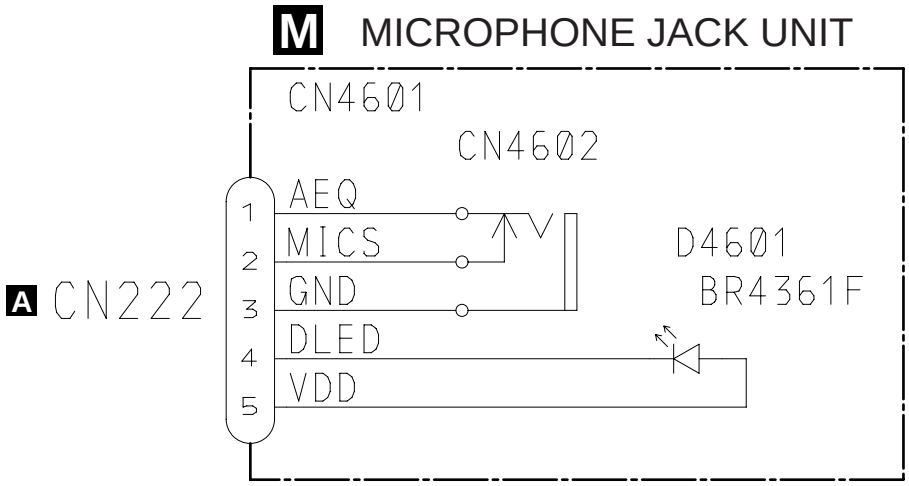

F-a F-b
:DIGITAL AUDIO
:FRONT AUDIO DIGITAL
:REAR AUDIO DIGITAL
:SUBWOOFER AUDIO DIGITAL
:ANALOG AUDIO INPUT
:FRONT AUDIO OUTPUT (Front/Miid)
:REAR AUDIO OUTPUT (Rear/Hi)
:SUBWOOFER AUDIO OUTPUT (Sub.w/Low)
F DSP UNIT
DSP IC
IC3201
PE2001AF
VDAC
DAC
IC3301
M.CD:+6.5dBs FM100%:+0.55dBs AM30%:-12.45dBs
M.CD:+2.1dBs FM100%:-4.45dBs AM30%:-17.45dBs
DSPIN
DSPRDY
DSPACK
DSPOUT
DSPCK
DSPRQ
DSPCS2
MCK
BICK
SDATA
LRCK
EMPOUT
VAK
(16.9344MHz)
CSS1067 X3101
DRIVER
DAC2
SUB. W/LOW
AD/DA CLK


IC3103
M5M51016BTP
S-RAM
VRAM
IC3102
TC9331F
DSP IC
PM0017AM
E-VOL
IO7
IO6
IO5
IO4
IO3
IO2
IO1
IO0
IO15
IO14
IO13
IO12
IO11
IO10
IO9
IO8
A0
A1
A2
A3
A4
A5
A6
A7
A10
A11
A9
A8
A13
A15
A14
A12
R3110 1K
R3109 1K
R3108 1K
R3111 1K
R3115 47K
C3117 10
C3159 R01
C3160 R01
C3163 R01
C3164 R01
C3309 R1
R3151 150
R3152 150
R3155 150
R3156 150
L3103
VST
VCK
VDT
GND
GNDA
MS
DSPACK
DSPOUT
DSPCK
DSPCD
DSPCS1
DSPRST
C3115 10P
C3116 10P
L3102
X3102 32.00MHz
R3112 1M
C3114 10
C3113 220P
VDSP
SW
LRCK
BICK
MCK
SDATA
SMODE
R3115 1K
R3114 1K
RC3
RC2

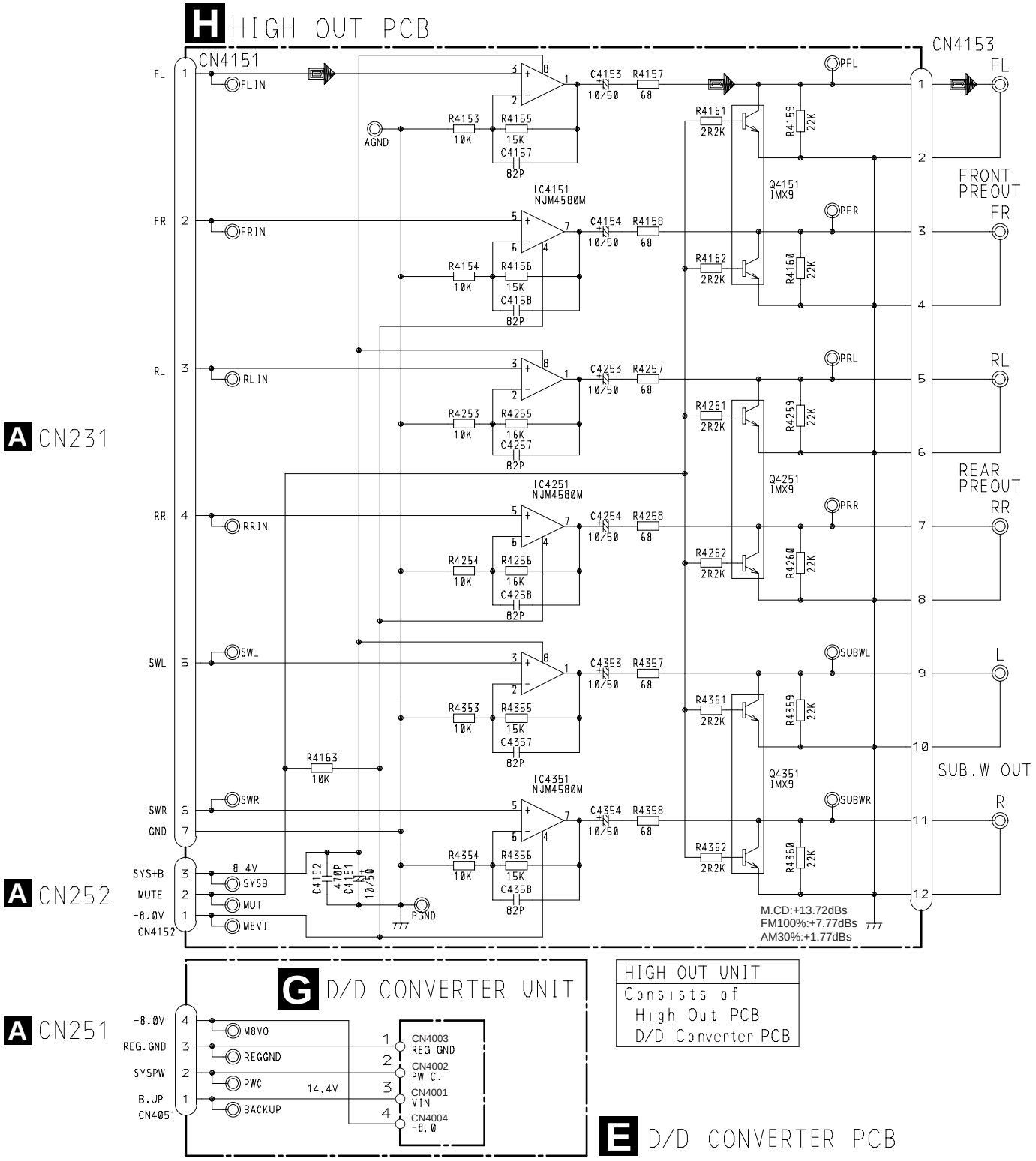
3.7 ASL UNIT


ASL UNIT
CN4501
SYS+B
NOISE
GND
R4517
27
R4501
2R2K
R4502
68K
R4504
4R7K
VR4501
CCP1319
10kΩ(B)
C4503
R68/50
C4504
10/16
D4501
MA152WK
C4512
100P
R4507
680K
IC4501
NJM2068MD
R4506
6R8K
R4508
562
C4505
47/10
CPM1011
MIC4501
C4502
47/10
Q4501
2SC2458
D4503
MA3075(M)
C4513
47/10
C4501
47/10
R4503
10K
R4505
470
R4509
390
C4506
47/16
D4502 MA3043(LMH)
C4508
22/10
R4510
4R7K
R4511
4R7K
R4512
4R7K
R4515
1K
IC4502
NJM2068MD
C4510
10/10
R4513
15K
R4514
15K
C4507
10/16
C4509
R68/50
C4511
R082
CN141

3.8 MICROPHONE JACK UNIT

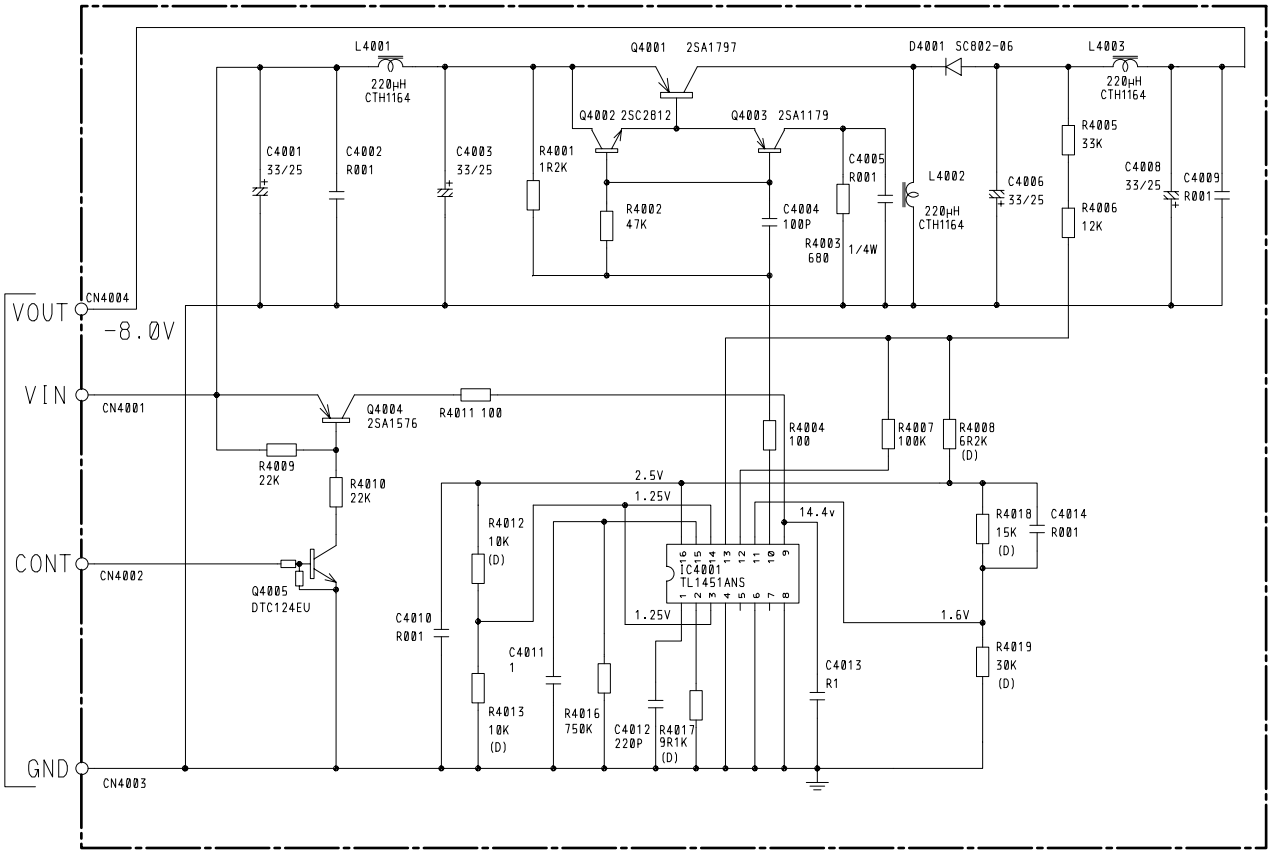


3.9 HIGH OUT UNIT (DEX-P1R/UC,DEX-P1/ES)



3.10 D/D CONVERTER UNIT (DEX-P1R/UC,DEX-P1/ES)

G D/D CONVERTER UNIT

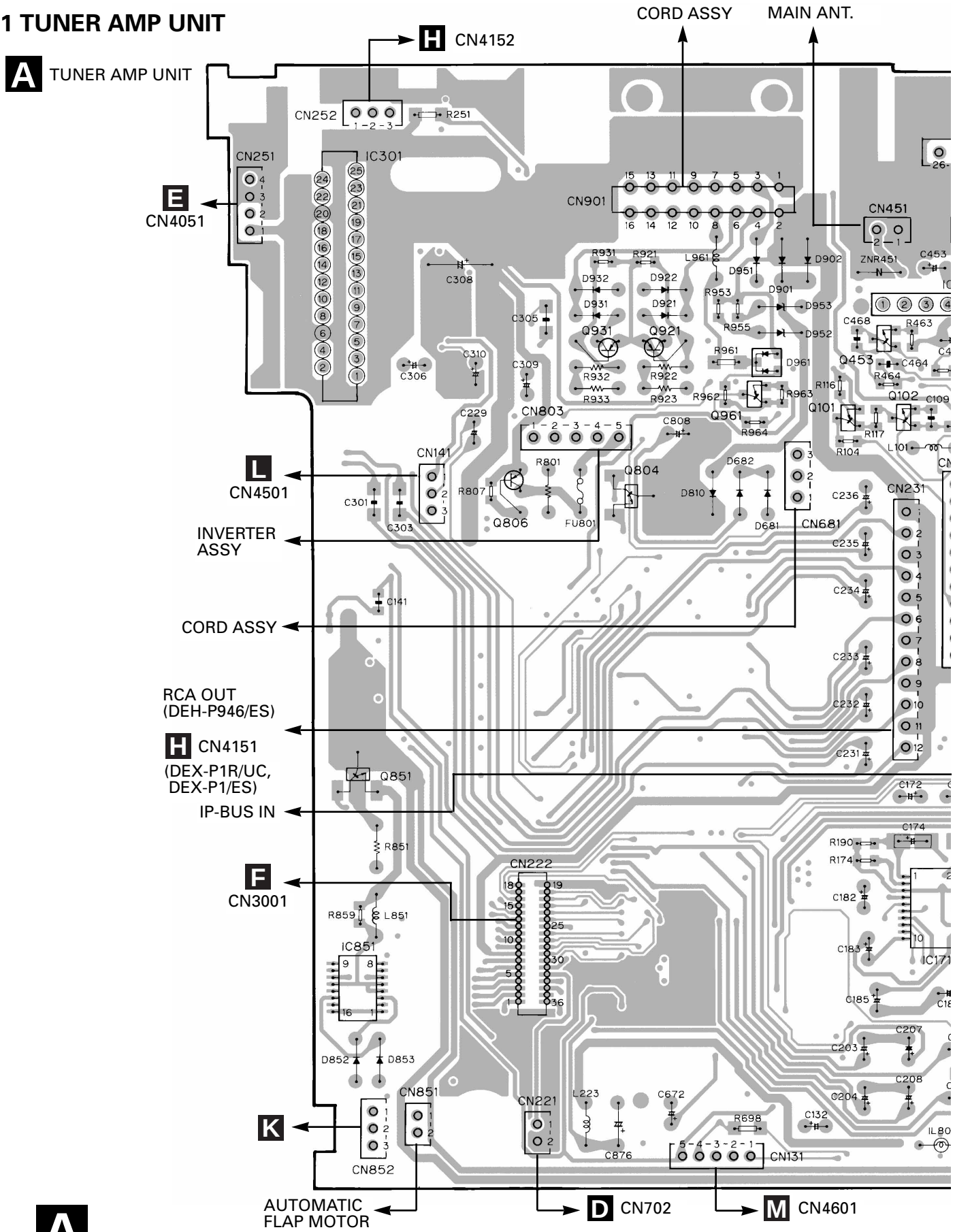


NOTE FOR PCB DIAGRAMS

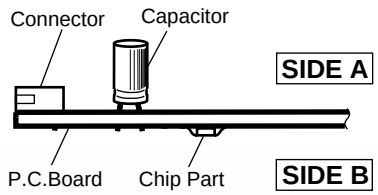
1. The parts mounted on this PCB include all necessary parts for several destination.
   For further information for respective destinations, be sure to check with the schematic diagram.

4. PCB CONNECTION DIAGRAM

4.1 TUNER AMP UNIT



2. Viewpoint of PCB diagrams



SIDE A

B

ADJ | IC, Q

IC301 IC401

IC451 Q452

Q931 Q921 Q453

Q961 IC941

Q101 Q102

VR551

Q806 Q804 IC501

IC102 IC581 Q871

IC871

IC971

Q851 IC601 Q911

IC171

IC851 IC651

Q807

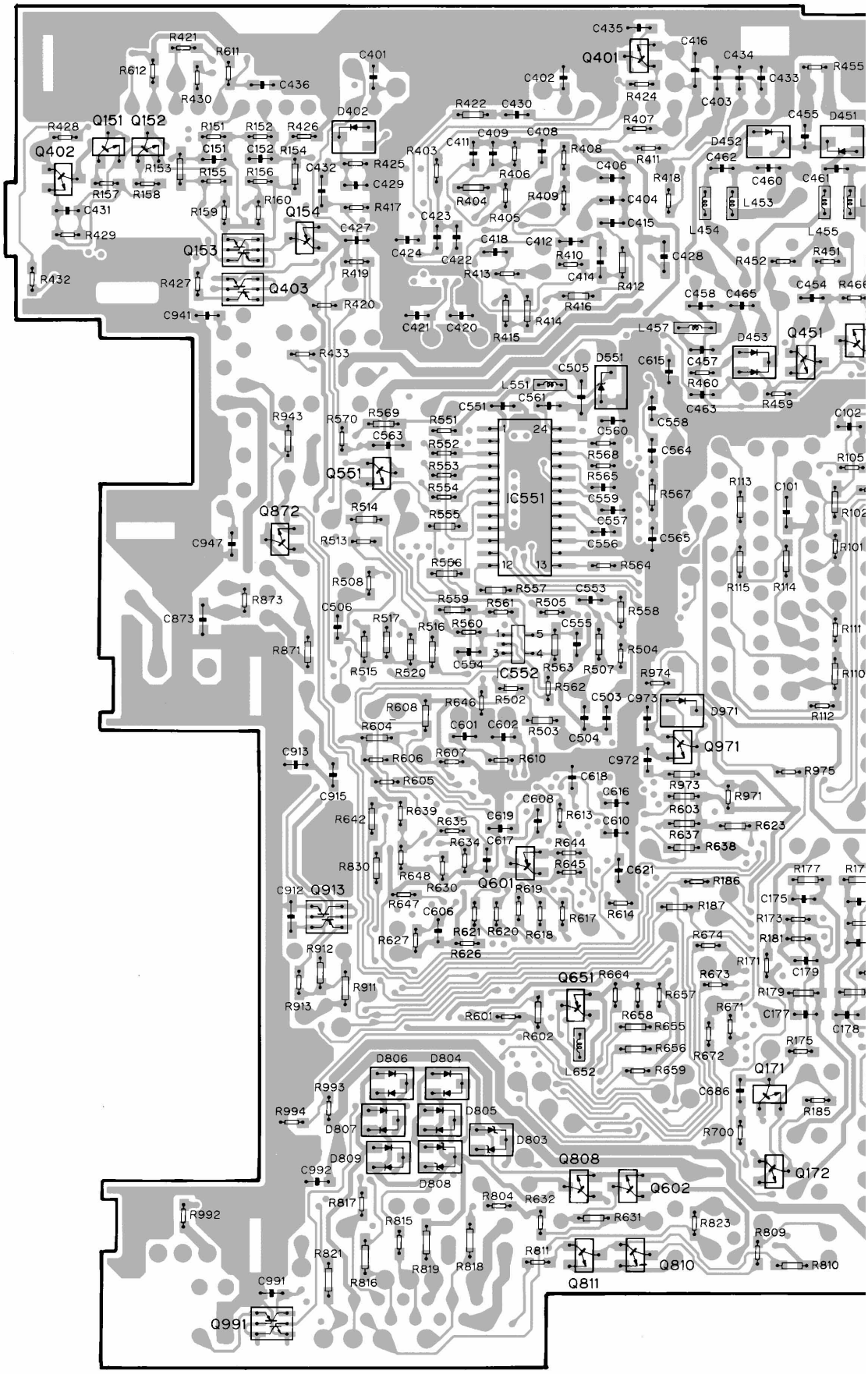
Q992

D CN701

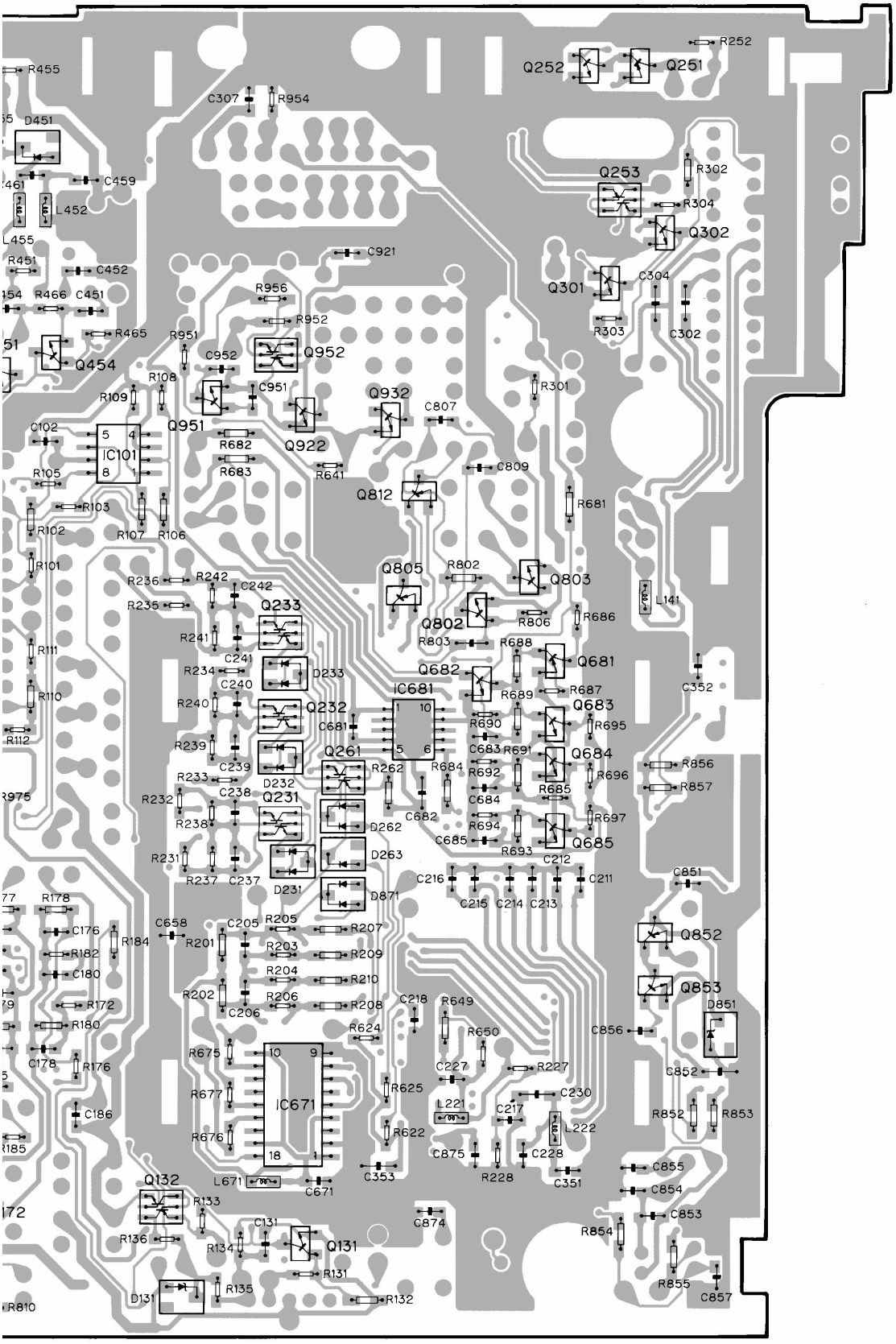
INVERTER ASSY

C CN1901

A TUNER AMP UNIT



SIDE B



IC, Q

A

Q401 Q252 Q251

Q151 Q152

Q402 Q253

Q302

Q154

Q153 Q301

Q403

Q454 Q952

Q451

Q951

Q922 Q932

B

IC101

Q551 Q812

IC551

Q872 Q803

Q805 Q802

Q233

IC552 Q681

Q682

Q232 IC681 Q683

Q971 Q261 Q684

Q231 Q685

C

Q601

Q852

Q913

Q853

Q651

IC671

Q171

Q172 Q132

Q808 Q602 Q131

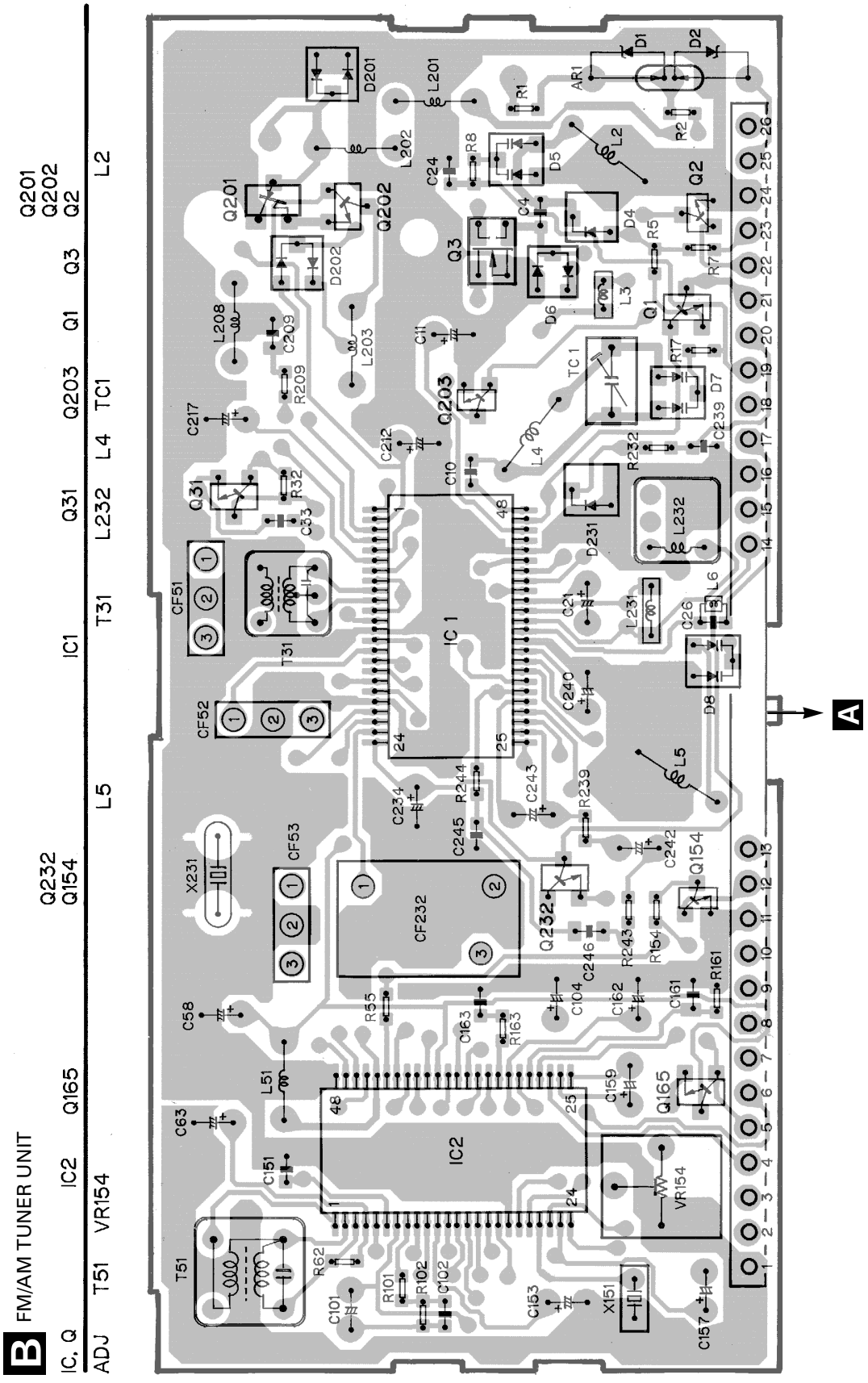
D

Q811 Q810

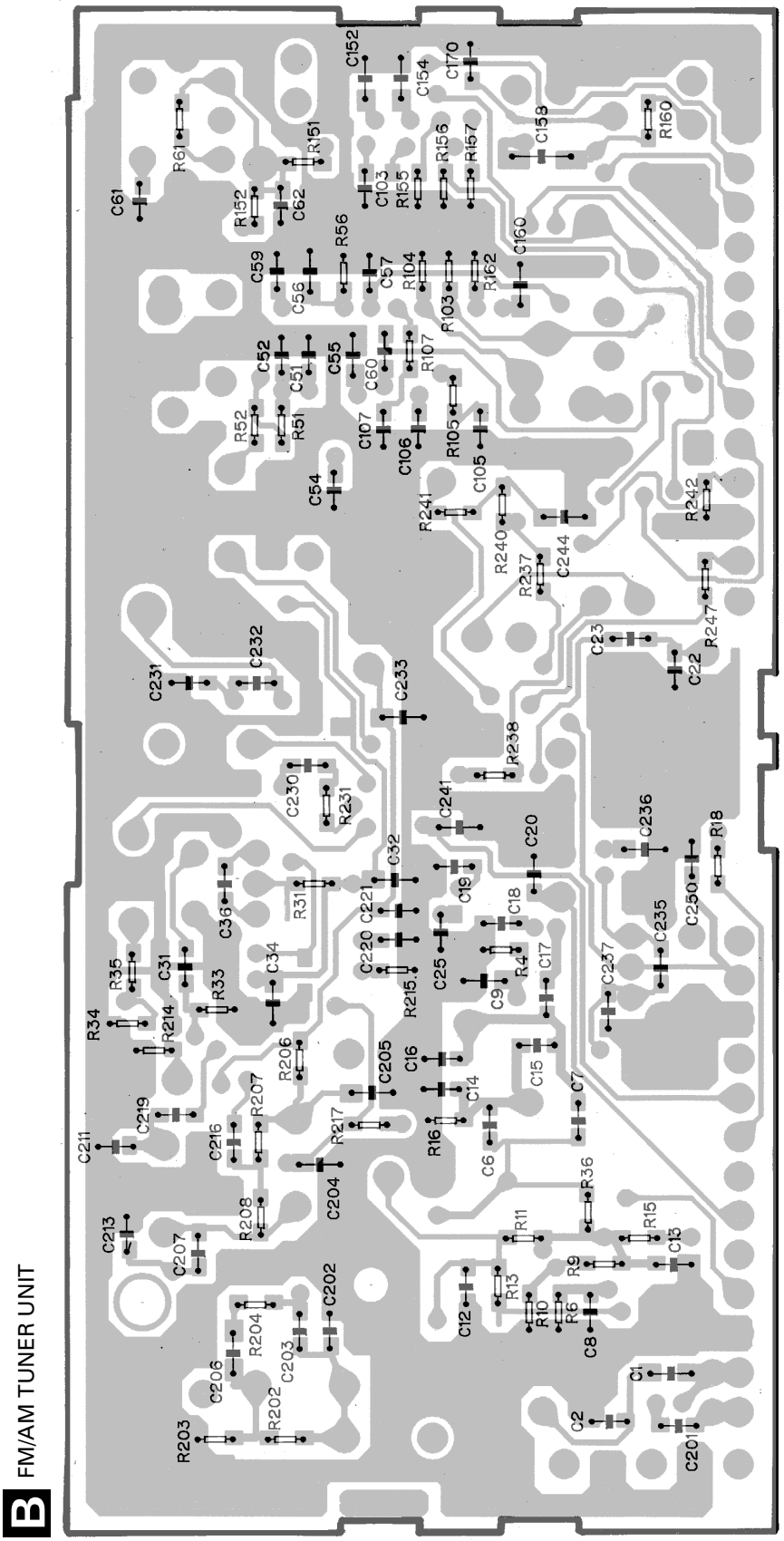
Q991

4.2 FM/AM TUNER UNIT

SIDE A



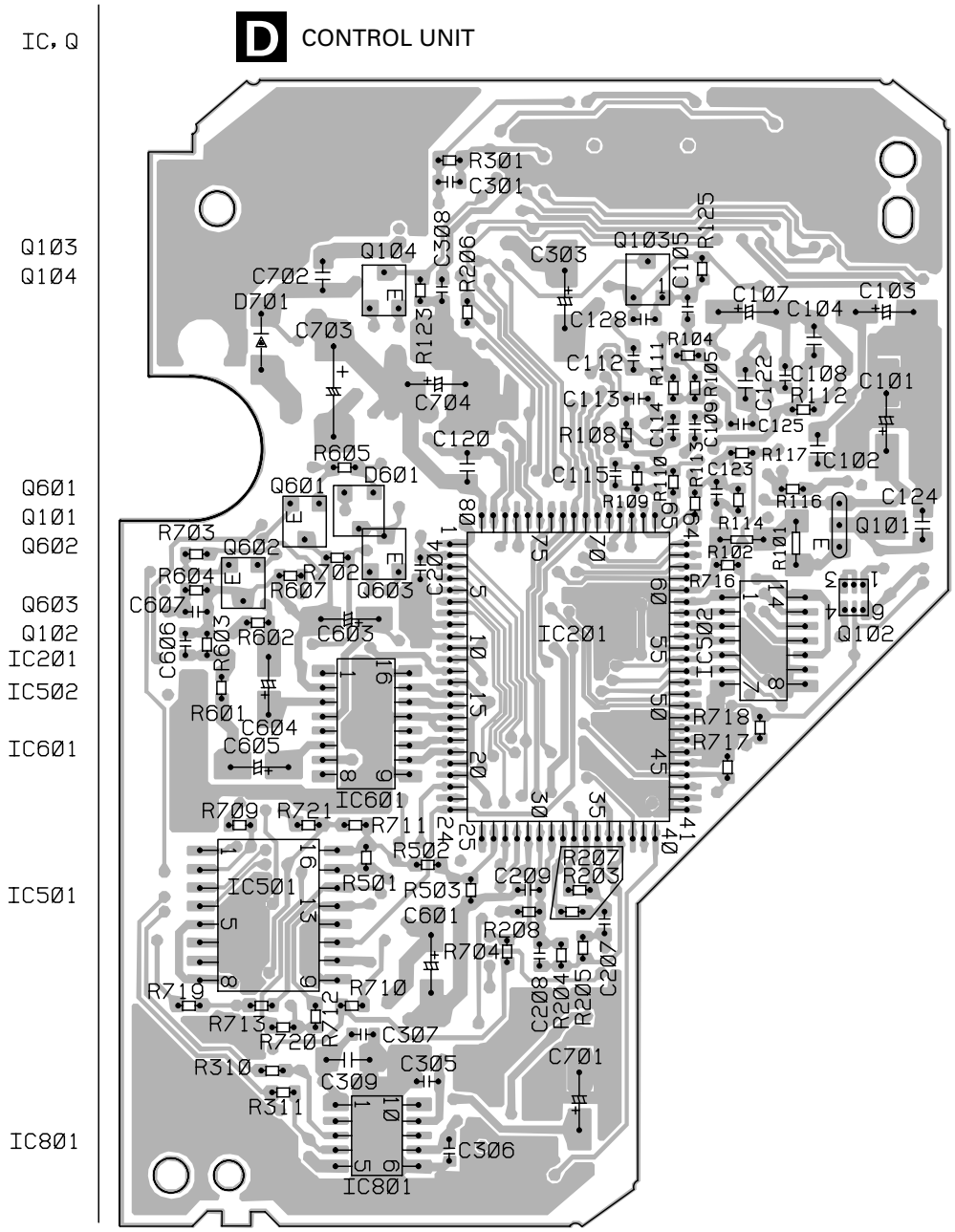
SIDE B



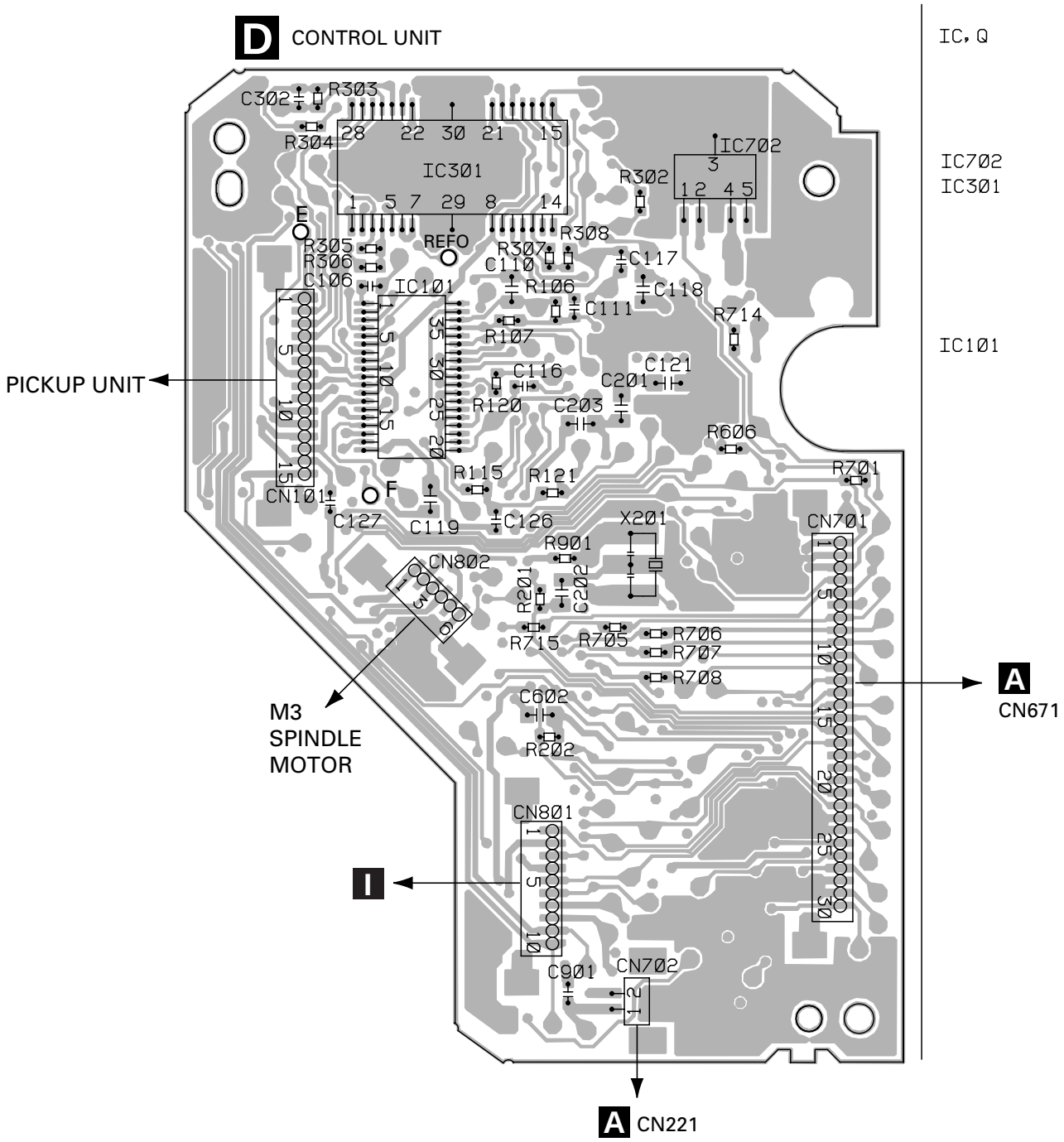
B FM/AM TUNER UNIT

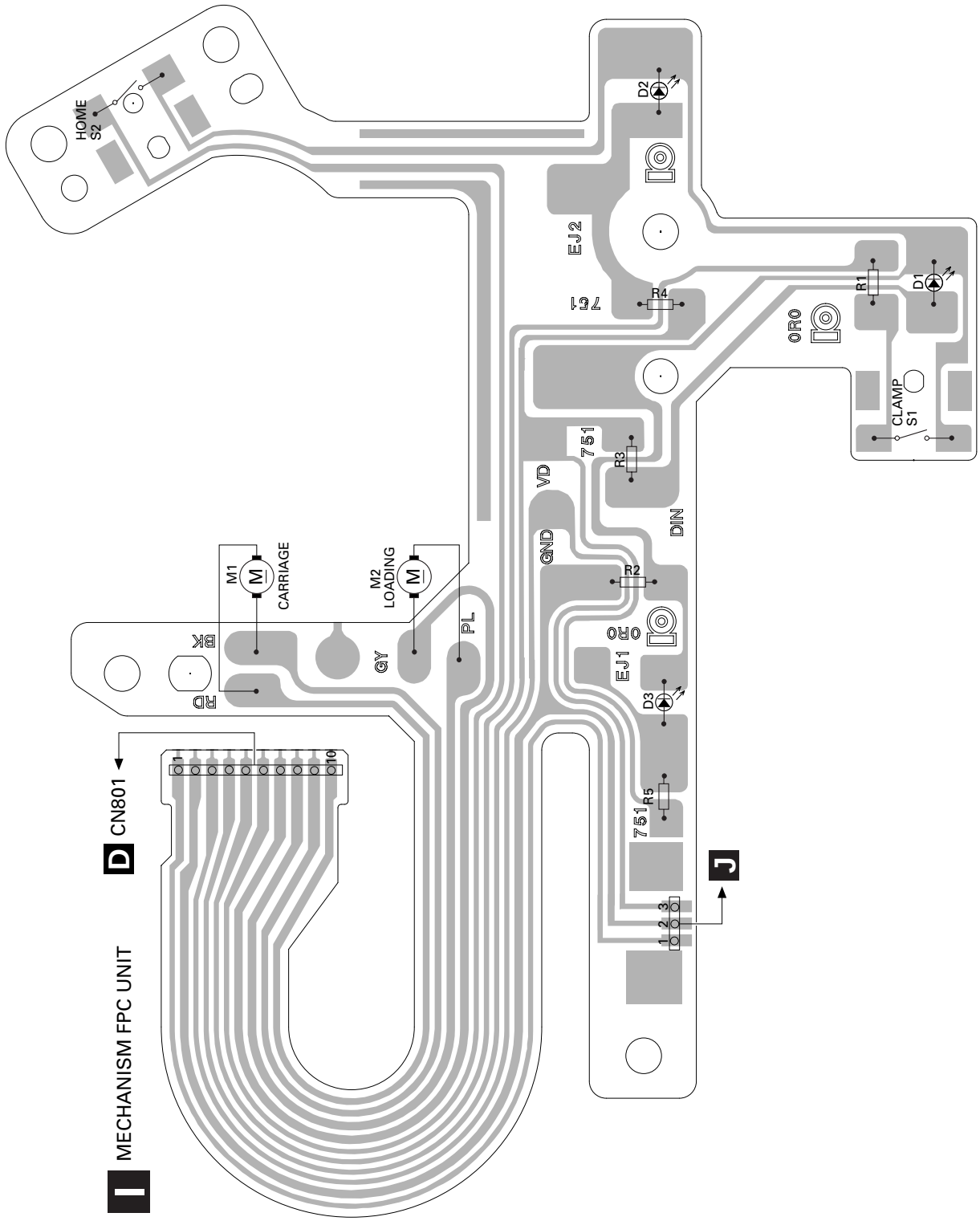
4.3 CD MECHANISM MODULE

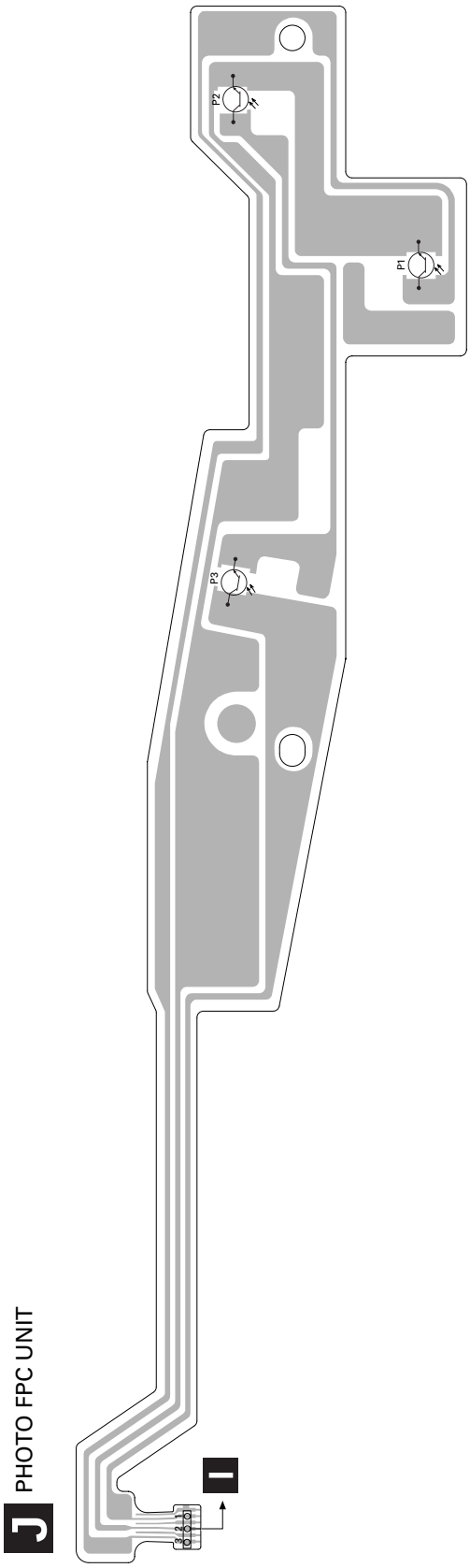
SIDE A



SIDE B


D CONTROL UNIT
IC, Q
IC702
IC301
IC101
PICKUP UNIT
M3
SPINDLE
MOTOR
A CN671
I
A CN221
C302
R303
R304
IC301
IC702
R302
REFO
R305
R306
C106
IC101
R308
R307
C110
C117
R106
C111
C118
R714
R107
C116
C121
C201
R120
C203
R606
R115
R121
R701
CN101
C127
C119
C126
X201
R901
CN802
CN701
R201
C202
R715
R705
R706
R707
R708
C602
R202
CN801
C901
CN702

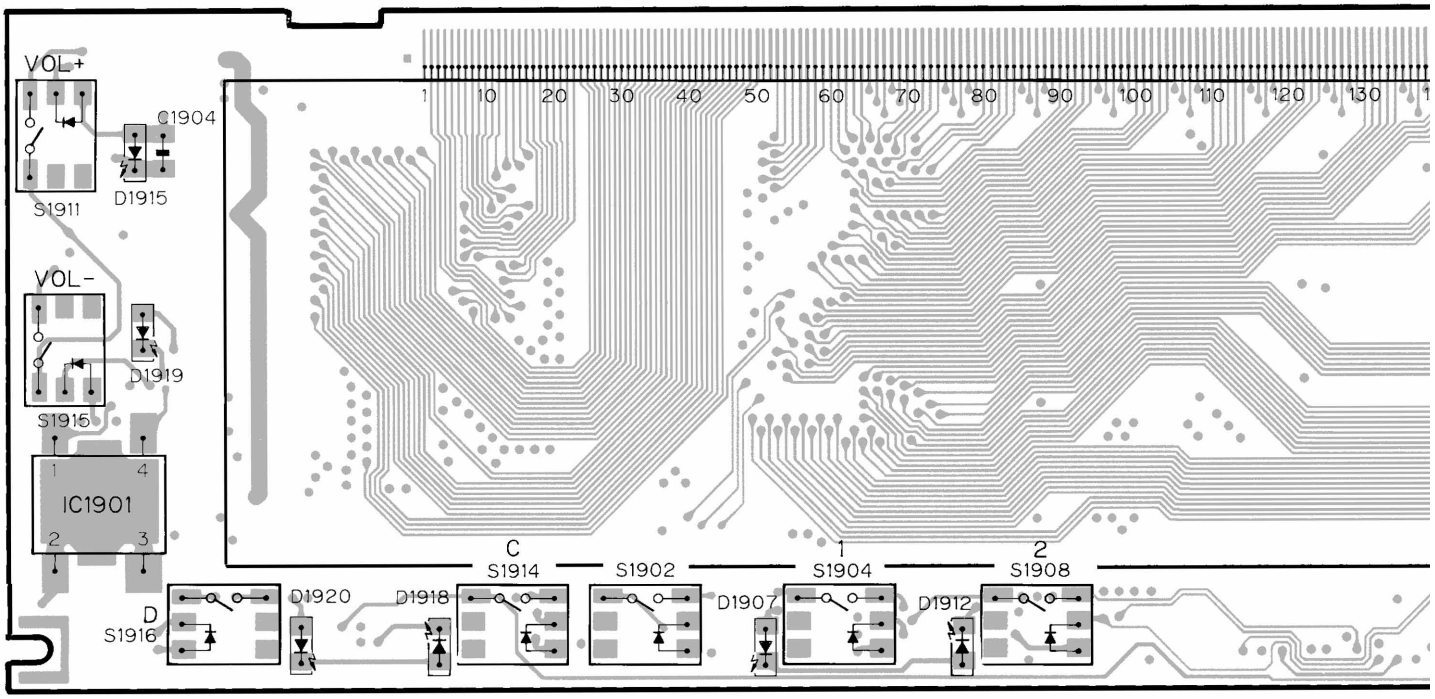

HOME
S2
D2
EJ2
R4
761
R1
D1
0R0
CLAMP
S1
751
R3
VD
GND
DIN
R2
M1
CARRIAGE
M2
LOADING
BK
RD
GY
PL
0R0
EJ1
D3
751
R5
J
1 2 3
D
CN801
1
10
I
MECHANISM FPC UNIT


P2
P1
P3
J
PHOTO FPC UNIT
1
2
3
4

4.4 KEYBOARD UNIT

C KEYBOARD UNIT

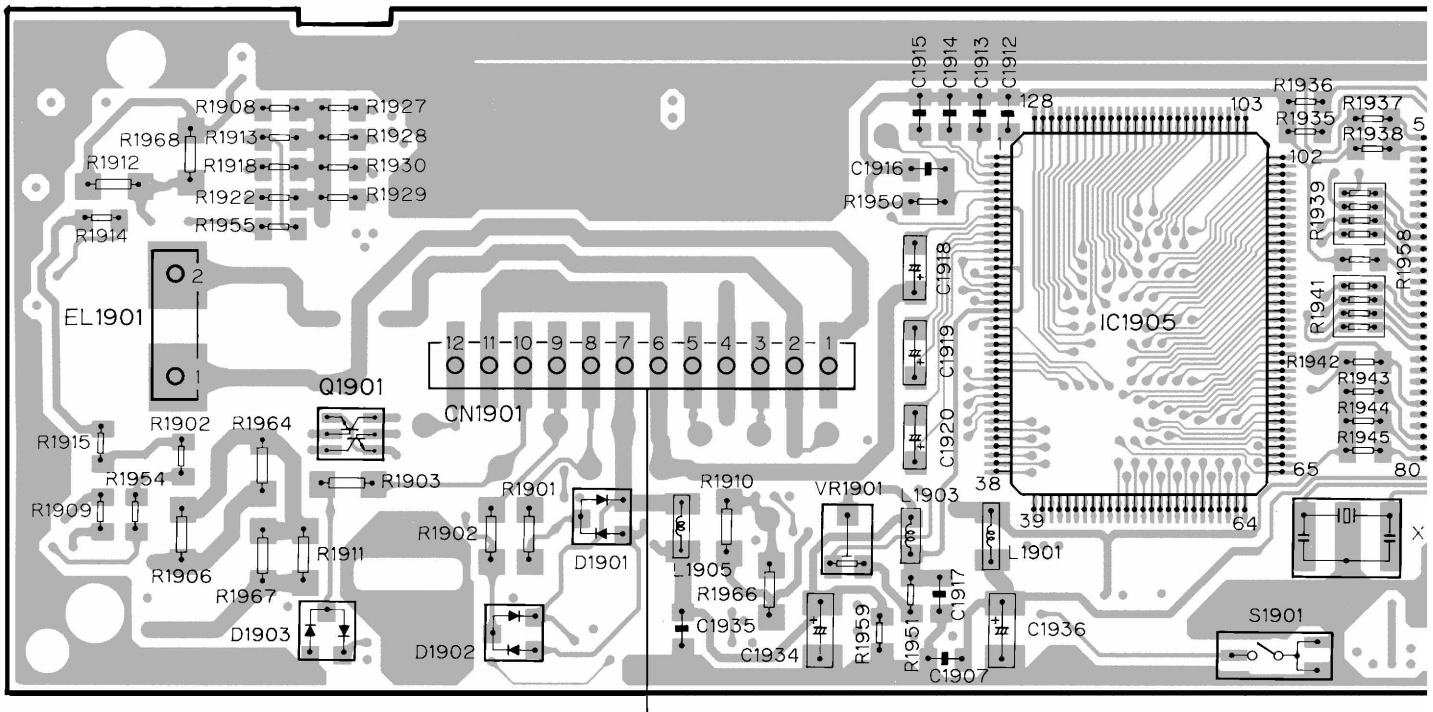
IC IC1901



C KEYBOARD UNIT

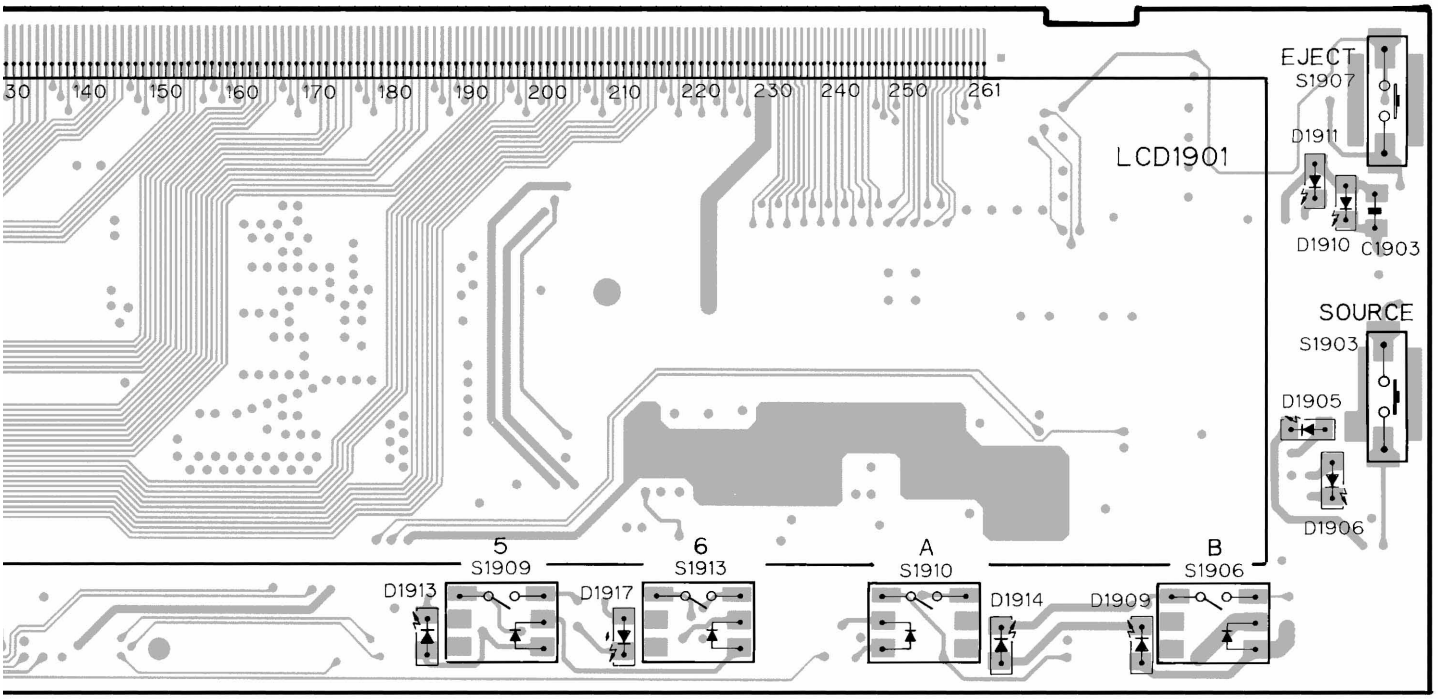
IC, Q Q1901 IC1905

ADJ VR1901

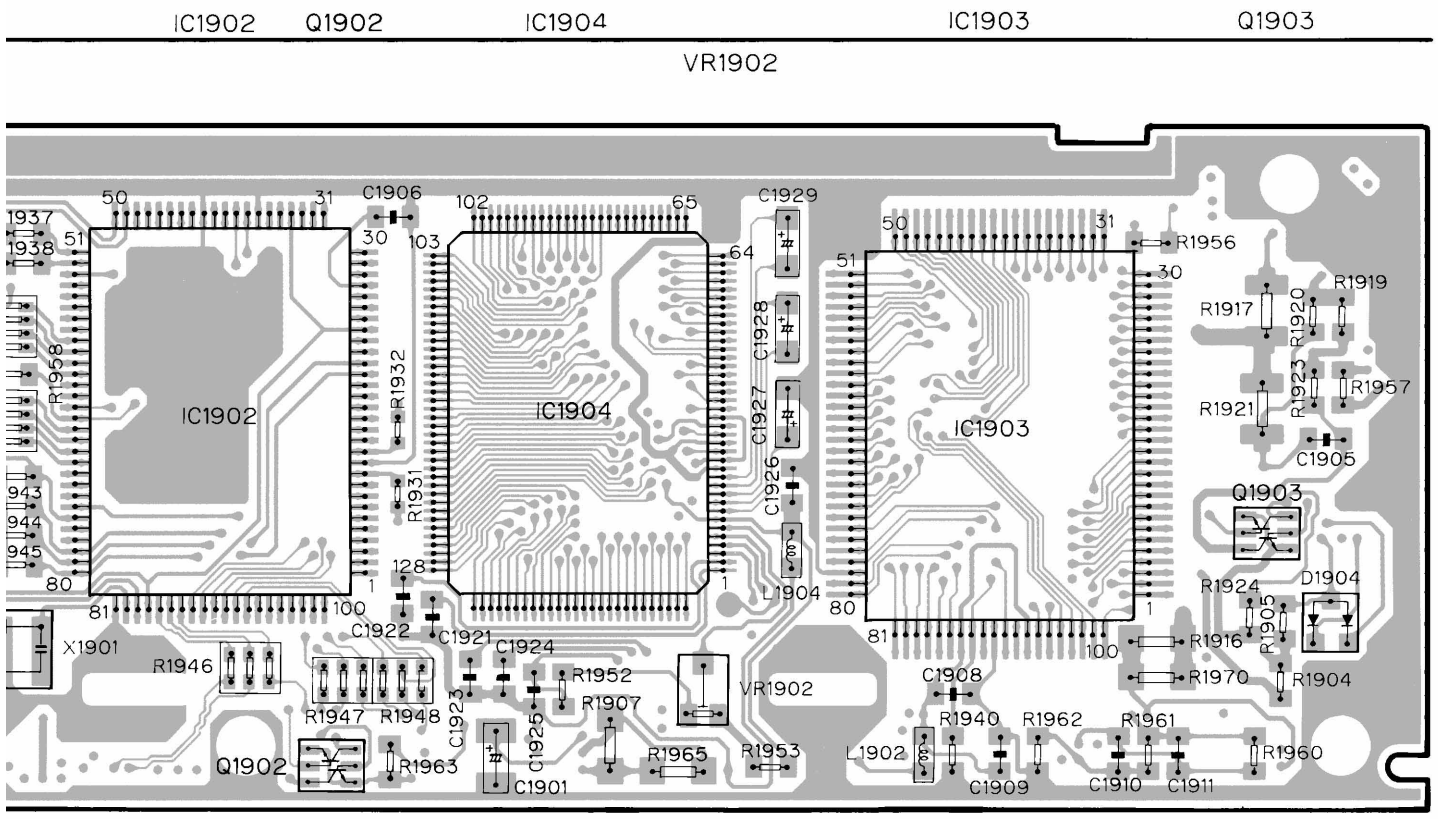


A CN801

SIDE A


EJECT
S1907
D1911
LCD1901
D1910
C1903
SOURCE
S1903
D1905
D1906
5
S1909
6
S1913
A
S1910
B
S1906
D1913
D1917
D1914
D1909

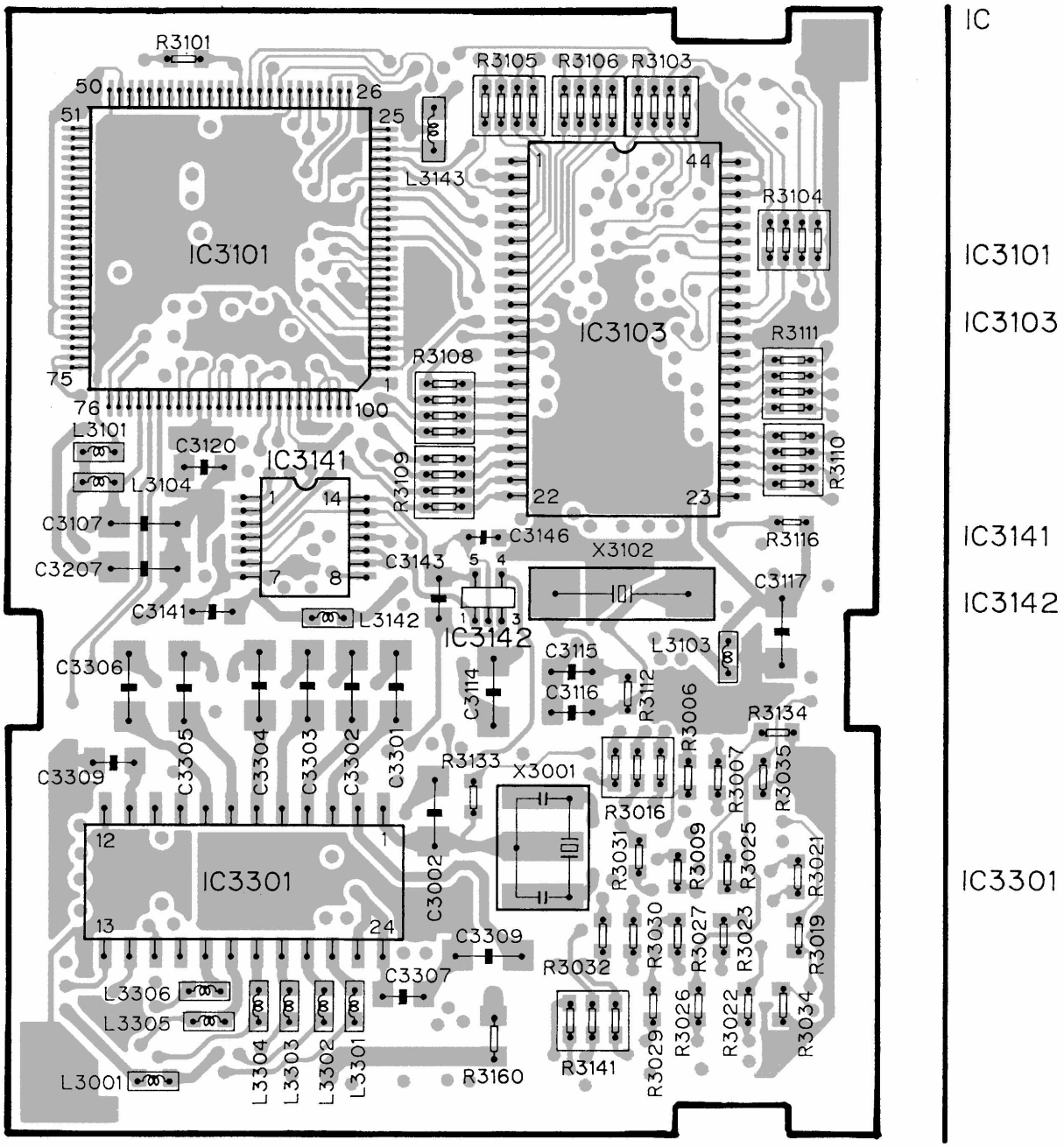
SIDE B


IC1902
Q1902
IC1904
IC1903
Q1903
VR1902
C1906
C1929
C1928
C1927
C1926
R1932
R1931
R1958
R1956
R1919
R1917
R1920
R1923
R1957
R1921
C1905
Q1903
D1904
R1924
R1916
R1970
R1904
X1901
R1946
R1947
R1948
R1963
C1922
C1921
C1924
C1923
C1925
C1901
R1952
R1907
R1965
R1953
C1908
R1940
R1962
R1961
R1960
L1902
C1909
C1910
C1911
L1904

4.5 DSP UNIT

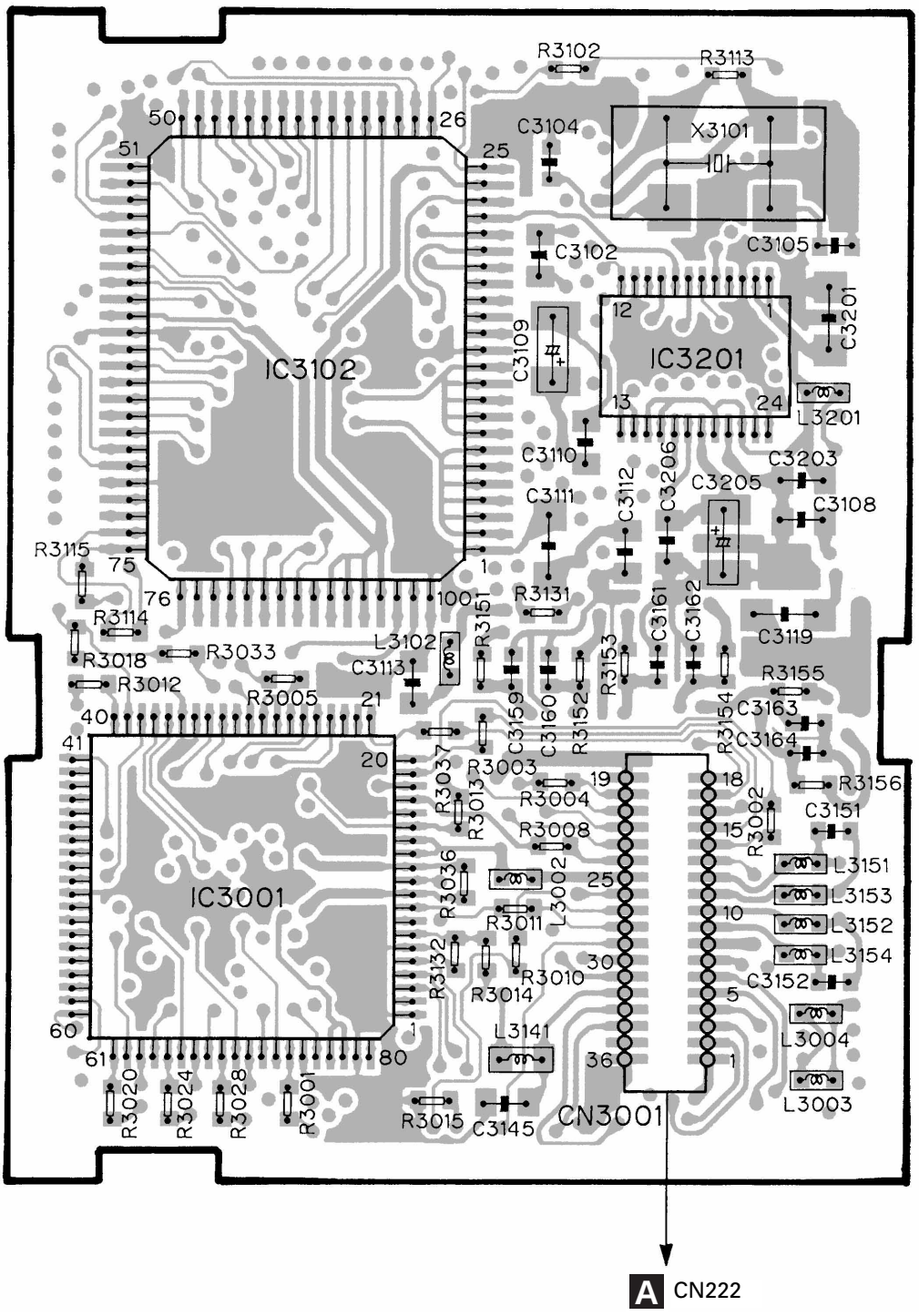
SIDE A

F DSP UNIT



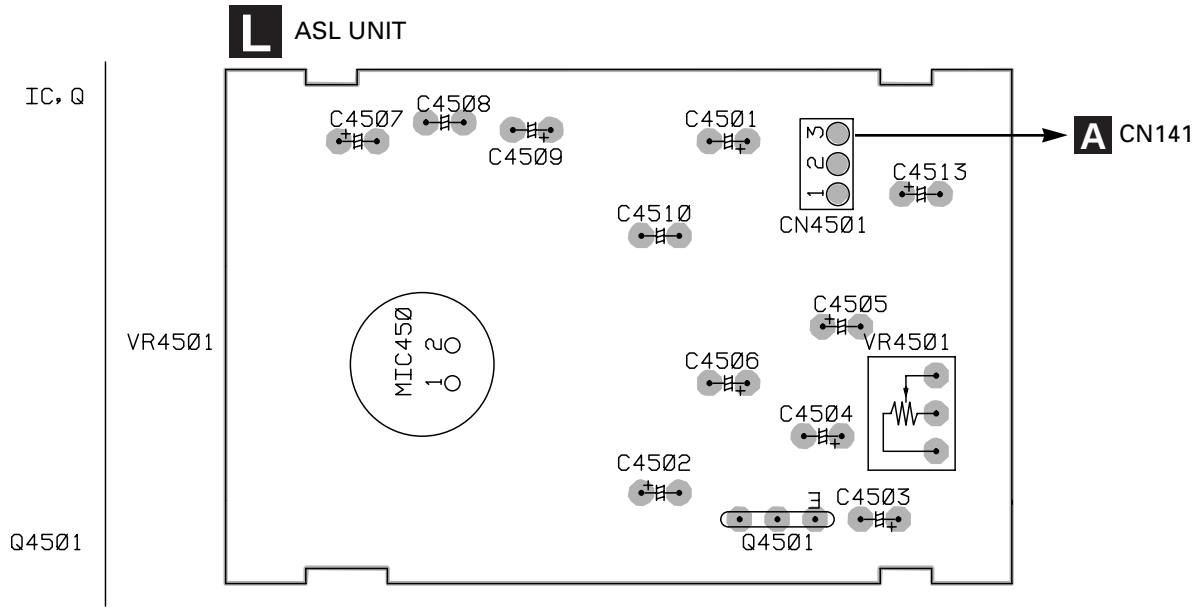
SIDE B

F DSP UNIT

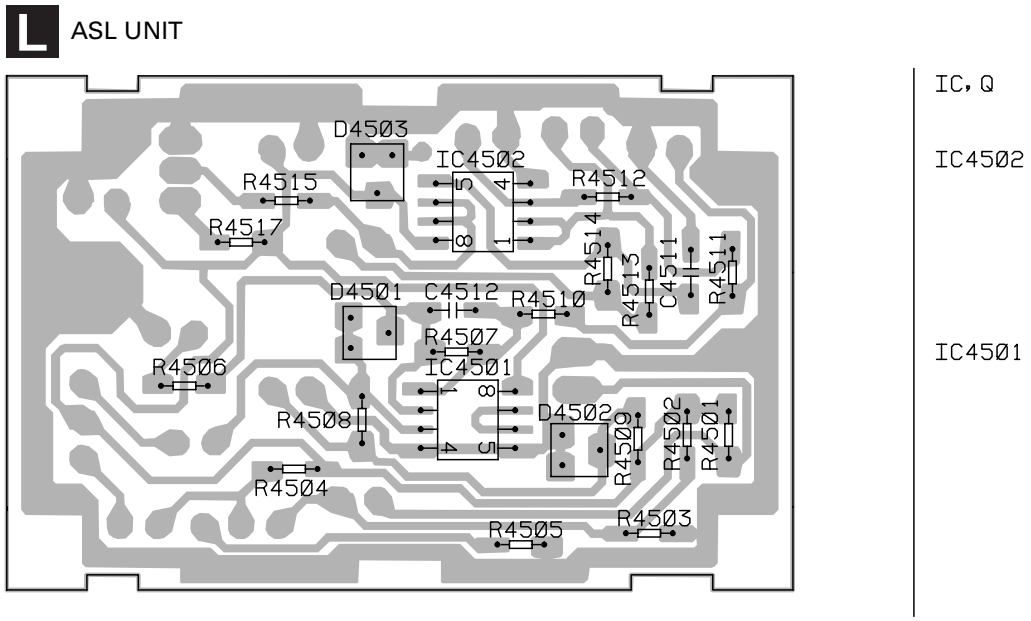


4.6 ASL UNIT

SIDE A

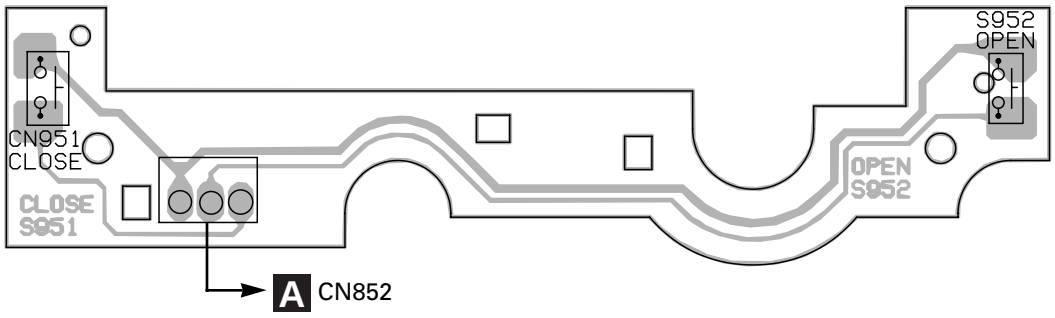


SIDE B



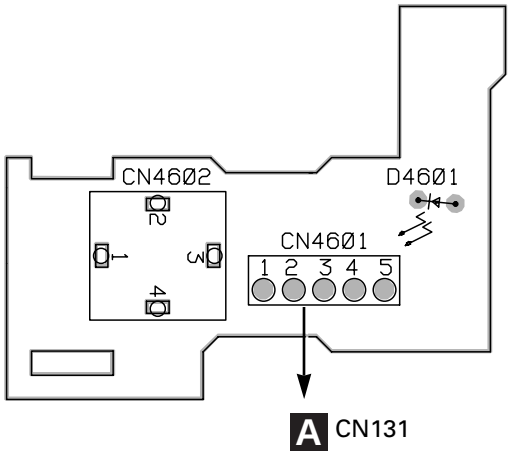
4.7 FLAP SENSE PCB, MICROPHONE JACK UNIT

K FLAP SENSE PCB



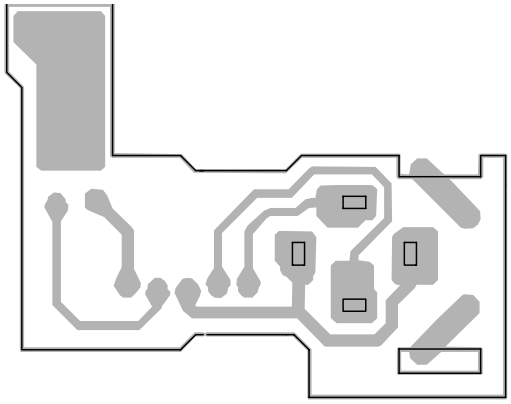
SIDE A

M MICROPHONE JACK UNIT

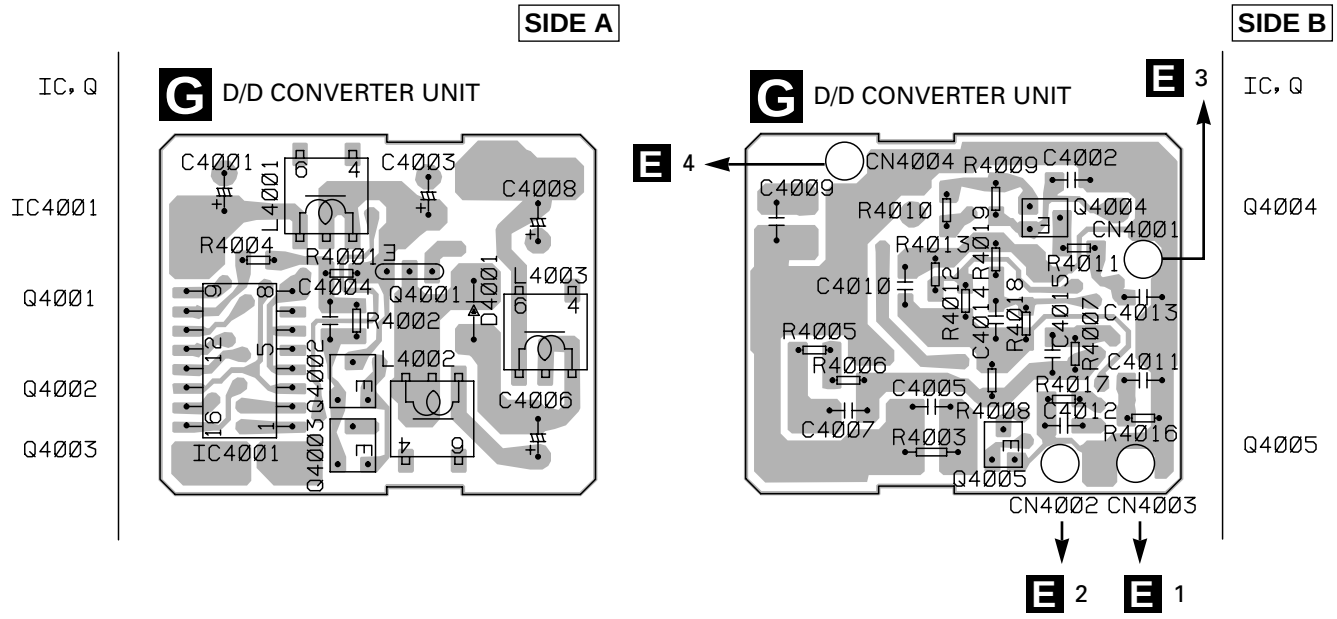


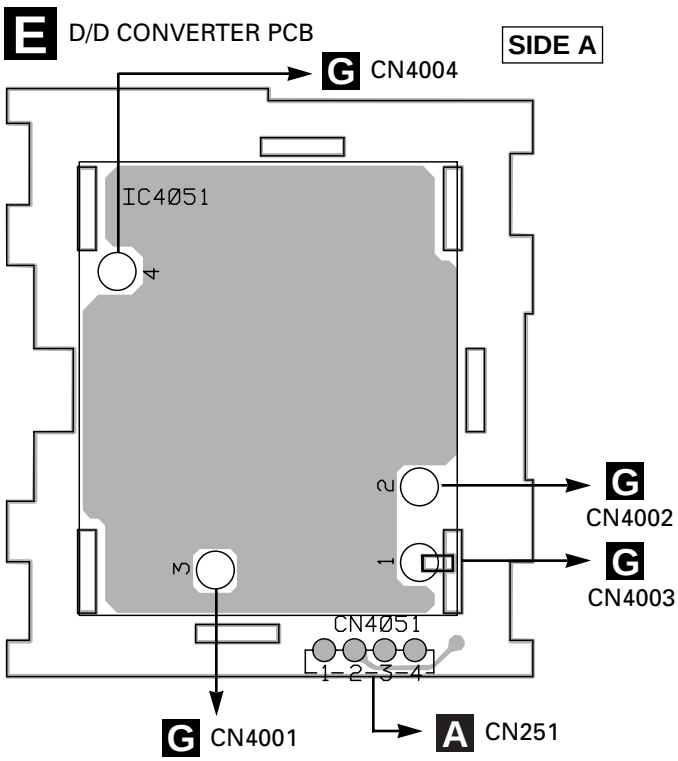
SIDE B

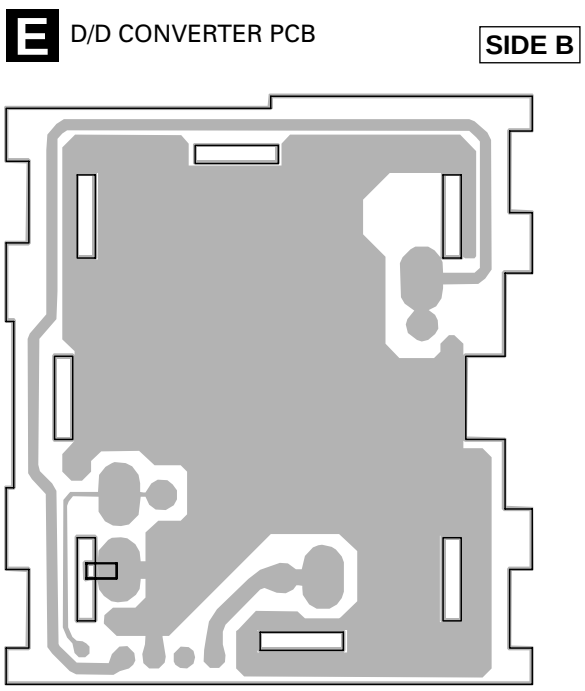
M MICROPHONE JACK UNIT



4.8 D/D CONVERTER UNIT, D/D CONVERTER PCB (DEX-P1R/UC, DEX-P1/ES)

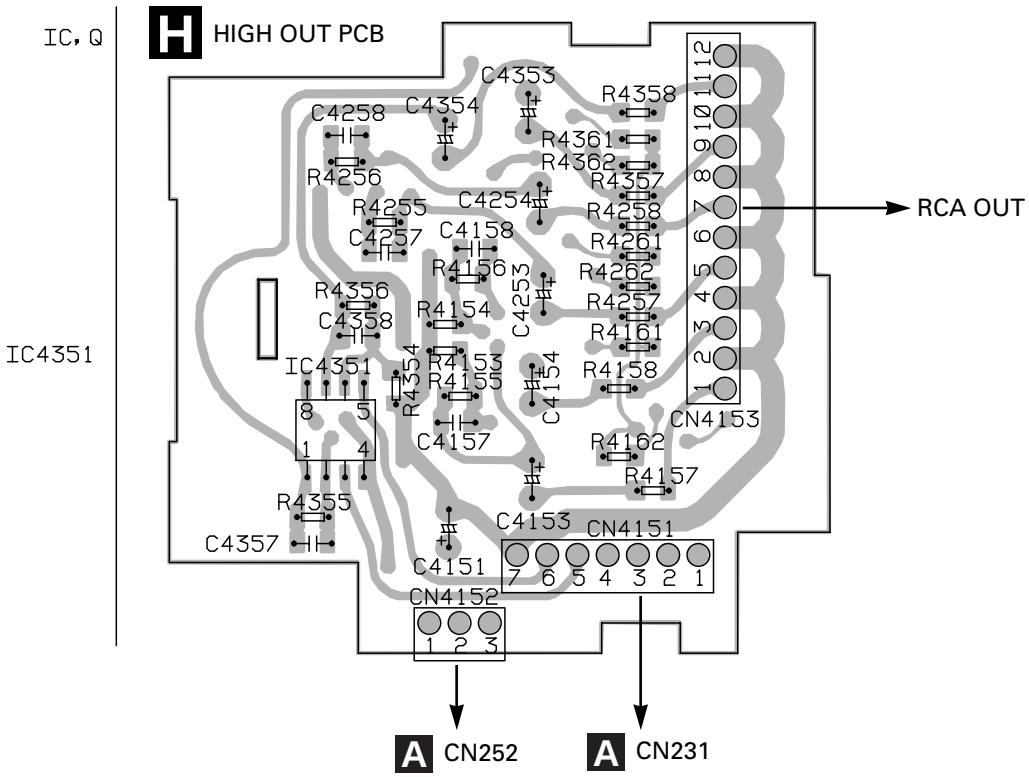




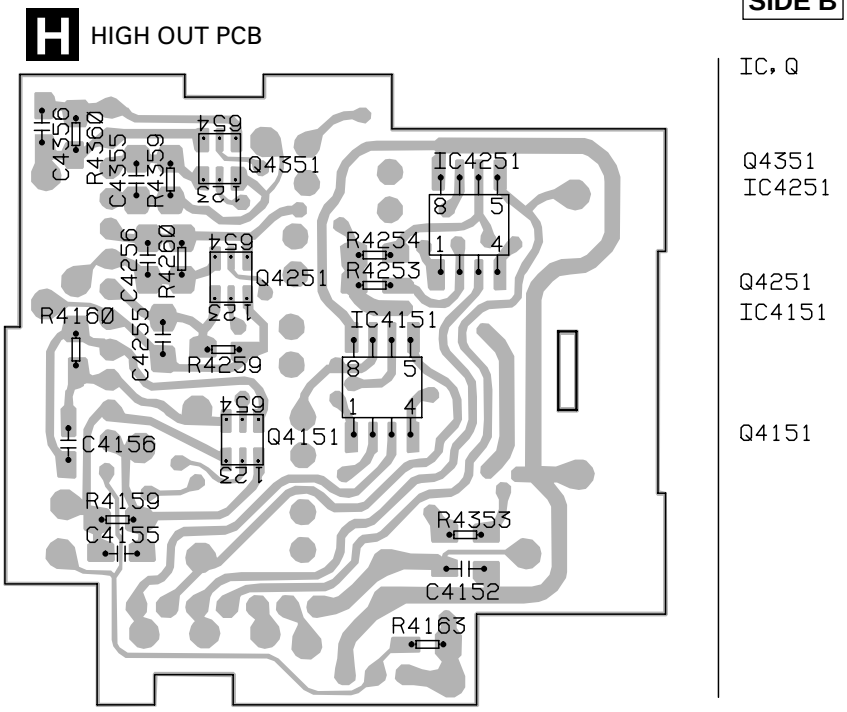


4.9 HIGH OUT PCB (DEX-P1R/UC, DEX-P1/ES)

SIDE A



SIDE B



5. ELECTRICAL PARTS LIST

NOTES:

- Parts whose parts numbers are omitted are subject to being not supplied.
- The part numbers shown below indicate chip components.

Chip Resistor

RS1/○S○○○J,RS1/○○S○○○J

Chip Capacitor (except for CQS.....)

CKS....., CCS....., CSZS.....

B Unit Number : CWE1472(DEX-P1R/UC)
Unit Number : CWE1485(DEH-P946/ES,DEX-P1/ES)
Unit Name : FM/AM Tuner Unit

MISCELLANEOUS

=====Circuit Symbol and No.		===Part Name	Part No.
IC	1	IC	PA4023B
IC	2	IC	PA4024A
Q	1	Transistor	2SC2412K
Q	2	Transistor	DTC124EU
Q	3	FET	3SK263
Q	31	Transistor	2SC2412K
Q	201	FET	2SK932
Q	202	Transistor	2SC2412K
Q	203	Transistor	DTC124EU
D	1	Diode	RD39JS
D	2	Diode	RD39JS
D	4	Diode	1SV250
D	5	Diode	KV1410-F1
D	6	Diode	MA157
D	7	Diode	KV1410-F1
D	8	Diode	KV1410-F1
D	201	Diode	MA157
D	202	Diode	MA157
D	231	Diode	SVC253
L	2	Coil (DEX-P1R/UC)	CTC1126
L	2	Coil (DEH-P946/ES,DEX-P1/ES)	CTC1108
L	3	Inductor	LCTB2R2K2125
L	4	Coil (DEX-P1R/UC)	CTC1126
L	4	Coil (DEH-P946/ES,DEX-P1/ES)	CTC1108
L	5	Coil (DEX-P1R/UC)	CTC1125
L	5	Coil (DEH-P946/ES,DEX-P1/ES)	CTC1107
L	6	Inductor (DEH-P946/ES,DEX-P1/ES)	LCTBR15K1608
L	51	Ferri-Inductor	LAU150K
L	201	Ferri-Inductor	LAU4R7K
L	202	Ferri-Inductor	LAU330K
L	203	Inductor	CTF1287
L	208	Inductor	LAU121K
L	231	Inductor	LCTA3R3J3225
T	31	Coil	CTE1117
T	51	Coil (DEX-P1R/UC)	CTC1159
T	51	Coil (DEH-P946/ES,DEX-P1/ES)	CTC1136
CF	51	Ceramic Filter (DEX-P1R/UC)	CTF1292
CF	51	Ceramic Filter (DEH-P946/ES,DEX-P1/ES)	CTF1290
CF	52	Ceramic Filter (DEX-P1R/UC)	CTF1292
CF	52	Ceramic Filter (DEH-P946/ES,DEX-P1/ES)	CTF1290
CF	53	Ceramic Filter (DEX-P1R/UC)	CTF1292
CF	53	Ceramic Filter (DEH-P946/ES,DEX-P1/ES)	CTF1290
CF	232	Ceramic Filter	CTF1348
X	151	Resonator 918.5Hz	CSS1365
X	231	Crystal Resonator 10.26MHz	CSS1111
VR	154	Semi-fixed 150kΩ(B)	CCP1213

RESISTORS

=====Circuit Symbol and No.		===Part Name	Part No.
R	1		RS1/16S225J
R	2		RS1/16S225J
R	4		RS1/16S154J
R	5		RS1/16S391J
R	6		RS1/16S223J
R	7		RS1/16S123J
R	8		RS1/16S332J
R	9		RS1/16S473J
R	10		RS1/16S223J
R	11		RS1/16S124J
R	13		RS1/16S563J
R	15		RS1/16S271J
R	16		RS1/16S104J
R	17		RS1/16S332J
R	18		RS1/16S332J
R	31		RS1/16S470J
R	32		RS1/16S822J
R	33		RS1/16S822J
R	34		RS1/16S331J
R	35		RS1/16S331J
R	51		RS1/16S271J
R	52		RS1/16S560J
R	55		RS1/16S102J
R	56		RS1/16S823J
R	61		RS1/16S392J
R	62		RS1/16S273J
R	101		RS1/16S272J
R	102		RS1/16S682J
R	103		RS1/16S333J
R	104		RS1/16S334J
R	105		RS1/16S683J
R	107		RS1/16S222J
R	151		RS1/16S222J
R	152		RS1/16S393J
R	155		RS1/16S273J
R	156		RS1/16S243J
R	157		RS1/16S203J
R	160		RS1/16S222J
R	161		RS1/16S563J
R	162		RS1/16S105J
R	163		RS1/16S223J
R	202		RS1/16S223J
R	203		RS1/16S225J
R	204		RS1/16S103J
R	206		RS1/16S220J
R	207		RS1/16S101J
R	208		RS1/16S102J
R	209		RS1/16S471J
R	214		RS1/16S822J
R	215		RS1/16S822J

=====Circuit Symbol and No.	===Part Name	Part No.
R 217		RS1/16S102J
R 231		RS1/16S272J
R 232		RS1/16S473J
R 237		RS1/16S103J
R 238		RS1/16S104J
R 239		RS1/16S104J
R 240		RS1/16S332J
R 241		RS1/16S202J
R 243		RS1/16S183J
R 244		RS1/16S392J
R 247		RS1/16S123J
CAPACITORS		
C 1		CCSQCH6R0D50
C 2		CCSRCK2R0C50
C 4		CCSRCH820J50
C 6		CCSRCH820J50
C 8		CKSRYB103K25
C 9		CKSQYB104K16
C 10		CCSRCKR50C50
C 11		CEJA1R0M50
C 12		CKSRYB222K50
C 13		CKSRYB222K50
C 14		CCSRCH220J50
C 15		CCSRCH6R0D50
C 16		CCSRCH8R0D50
C 17		CKSRYB222K50
C 18		CKSRYB103K25
C 19		CKSRYB222K50
C 20		CKSRYB222K50
C 21		CEJA100M16
C 22		CCSRTH9R0D50
C 23		CCSRTH120J50
C 24		CCSRCH471J50
C 25		CKSRYB103K25
C 26	(DEX-P1R/UC)	CCSRCH101J50
C 31		CKSRYB103K25
C 32		CKSQYB472K50
C 33		CCSRCH5R0C50
C 34		CKSQYB104K16
C 36		CCSRRH201J50
C 51		CKSRYB223K25
C 52		CKSRYB103K25
C 54		CCSRCH470J50
C 55		CKSQYB223K25
C 56		CKSQYB104K16
C 57		CKSRYB472K50
C 58		CEJA330M10
C 59		CKSRYB103K25
C 60	(DEH-P946/ES,DEX-P1/ES)	CKSRYB102K50
C 61		CCSRCH270J50
C 62		CKSRYB103K25
C 63		CEJAR22M50
C 101		CEJANP100M10
C 102		CKSRYB182K50
C 103		CKSRYB682K25
C 104		CEJA2R2M50
C 105		CKSRYB103K25
C 106		CCSRCH151J50
C 107		CKSRYB103K25
C 151		CKSRYB472K50
C 152		CKSQYB104K16
C 153		CEJA3R3M50
C 154		CKSQYB104K16
C 157		CEJA3R3M50
C 158		CKSYB474K16
C 159		CEJA220M6R3
C 160		CKSQYB104K16

=====Circuit Symbol and No.	===Part Name	Part No.
C 161		CKSQYB104K16
C 162		CEJA3R3M50
C 163		CKSRYB102K50
C 170		CCSRCH100D50
C 201		CCSRCH471J50
C 202		CCSRCH100D50
C 203		CKSRYB332K50
C 204		CKSQYB473K16
C 205		CKSQYB473K16
C 206		CKSQYB104K16
C 207		CCSRCH560J50
C 209		CKSQYB104K16
C 211		CCSRCH101J50
C 212		CEJA470M6R3
C 213		CKSRYB103K25
C 216		CCSRCH101J50
C 217		CEJA1R5M50
C 219		CCSRCH471J50
C 220		CKSRYB103K25
C 230		CKSRYB103K25
C 231		CCSRCH330J50
C 232		CCSRCH150J50
C 233		CKSQYB104K16
C 234		CEJA330M10
C 235		CKSRYB332K50
C 236		CKSQYB473K16
C 237		CCSRCH120J50
C 239		CKSRYB472K50
C 240		CEJAR47M50
C 241		CKSQYB104K16
C 242		CEJAR47M50
C 243		CEJAR33M50
C 244		CKSQYB473K16
C 245		CKSRYB333K16
C 246		CKSQYB473K16
C 250		CCSRCH471J50

D Unit Number : CWX2166
Unit Name : Control Unit

MISCELLANEOUS

IC	101	IC	UPC2572GS
IC	201	IC	UPD63702AGF
IC	301	IC	BA6797FM
IC	502	IC	LC89170M
IC	702	IC	BA05SFP
IC	801	IC	LB1930M
Q	101	Transistor	2SD1664
Q	102	Transistor	UMD2N
D	701	Diode	1SR154-400

RESISTORS

R 101	RS1/8S100J
R 102	RS1/8S120J
R 104	RS1/16S822J
R 105	RS1/16S682J
R 106	RS1/16S183J
R 107	RS1/16S822J
R 108	RS1/16S333J
R 109	RS1/16S683J
R 110	RS1/16S134J
R 111	RS1/16S273J
R 112	RS1/16S222J
R 113	RS1/16S103J
R 114	RS1/16S103J
R 115	RS1/16S102J
R 116	RS1/16S163J

=====Circuit Symbol and No.		===Part Name	Part No.
R	117		RS1/16S163J
R	120		RS1/16S101J
R	121		RS1/16S101J
R	125		RS1/16S102J
R	201		RS1/16S104J
R	202		RS1/16S473J
R	206		RS1/16S101J
R	207		RS1/16S0R0J
R	208		RS1/16S0R0J
R	301		RS1/16S303J
R	302		RS1/16S203J
R	303		RS1/16S303J
R	304		RS1/16S203J
R	305		RS1/16S103J
R	306		RS1/16S203J
R	307		RS1/16S103J
R	308		RS1/16S103J
R	310		RS1/16S102J
R	311		RS1/16S102J
R	501		RS1/16S0R0J
R	503		RS1/16S0R0J
R	701		RS1/16S221J
R	702		RS1/16S221J
R	703		RS1/16S221J
R	705		RS1/16S102J
R	706		RS1/16S681J
R	707		RS1/16S681J
R	708		RS1/16S681J
R	709		RS1/16S681J
R	711		RS1/16S471J
R	712		RS1/16S471J
R	713		RS1/16S471J
R	714		RS1/16S102J
R	717		RS1/16S0R0J
R	718		RS1/16S102J
R	901		RS1/16S302J
CAPACITORS			
C	101		CEVL101M6R3
C	102		CKSQYB104K16
C	103		CEVL470M6R3
C	104		CKSQYB334K16
C	105		CCSRCH330J50
C	106		CKSRYB103K25
C	107		CEVL4R7M35
C	108		CKSRYB273K25
C	109		CCSRCH101J50
C	110		CKSQYB104K16
C	111		CKSRYB332K50
C	112		CKSRYB473K16
C	113		CKSRYB103K25
C	114		CKSRYB391K50
C	115		CCSRCH121J50
C	116		CKSRYB682K25
C	117		CKSRYB333K16
C	118		CKSQYB334K16
C	119		CKSQYB334K16
C	120		CKSQYB334K16
C	121		CKSQYB334K16
C	122		CKSQYB104K16
C	123		CKSRYB472K50
C	124		CKSQYB104K16
C	125		CCSRCH6R0D50
C	126		CKSRYB153K25
C	127		CCSRCH102J25
C	201		CKSQYB334K16
C	202		CKSQYB104K16
C	203		CKSQYB104K16

=====Circuit Symbol and No.		===Part Name	Part No.
C	204		CKSRYB471K50
C	303		CEVL470M16
C	305		CKSRYB103K25
C	306		CKSRYB103K25
C	309		CKSYB475K10
C	601		CEV101M6R3
C	602		CKSQYB104K16
C	701		CEV100M25
C	702		CKSQYB334K16
C	703	22µF/6.3V	CCH1300
C	704		CEVL101M6R3
C	901		CKSRYB221K50

A Unit Number : CWM5693(DEX-P1R/UC)
Unit Name : Tuner Amp Unit

MISCELLANEOUS

IC	101	IC	CA0008AM
IC	102	IC	TA2050S
IC	171	IC	BA3131FS
IC	401	IC	PM2006A
IC	501	IC	PD6191A
IC	551	IC	PMW001B
IC	581	IC	PD8034A
IC	601	IC	PD4908A
IC	651	IC	PD4931A
IC	671	IC	PD0236AM
IC	681	IC	TPD1018F
IC	851	IC	BA6288FS
IC	871	IC	NJM78M05FA
IC	941	IC	PA2024A
IC	971	IC	S-80730ANDT
Q	101	Transistor	2SA1162
Q	102	Transistor	UN2212
Q	131	Transistor	2SC2712
Q	132	Transistor	IMD2A
Q	171	Transistor	DTC314TK
Q	172	Transistor	DTC314TK
Q	231	Transistor	FMG13
Q	232	Transistor	FMG13
Q	233	Transistor	FMG13
Q	251	Transistor	DTA143EK
Q	252	Transistor	UN2211
Q	253	Transistor	IMD2A
Q	261	Transistor	IMD2A
Q	302	Transistor	UN2212
Q	401	Transistor	2SC2712
Q	601	Transistor	UN2111
Q	602	Transistor	UN2211
Q	651	Transistor	UN2112
Q	681	Transistor	2SA1162
Q	682	Transistor	UN2212
Q	683	Transistor	2SC2712
Q	684	Transistor	2SC2712
Q	685	Transistor	2SC2712
Q	802	Transistor	2SC2712
Q	803	Transistor	UN2211
Q	804	Transistor	2SD1760F5
Q	805	Transistor	UN2111
Q	806	Transistor	2SB1238
Q	807	Transistor	2SB1238
Q	808	Transistor	DTC143EK
Q	810	Transistor	2SC2712
Q	811	Transistor	2SC2712
Q	812	Transistor	DTA144EK
Q	851	Transistor	2SD1760F5
Q	852	Transistor	UN2111

Circuit Symbol and No.		Part Name	Part No.
Q	853	Transistor	UN2212
Q	871	Transistor	2SB1238
Q	872	Transistor	DTC123EK
Q	911	Transistor	2SD1760F5
Q	913	Transistor	IMD2A
Q	921	Transistor	2SB1243
Q	922	Transistor	UN2212
Q	931	Transistor	2SB1243
Q	932	Transistor	UN2212
Q	951	Transistor	UN2211
Q	952	Transistor	IMX1
Q	961	Transistor	2SA1162
Q	971	Transistor	2SC2712
Q	991	Transistor	IMD2A
Q	992	Transistor	2SD2396
D	131	Diode	MA3039(L)
D	231	Diode	MA152WA
D	232	Diode	MA152WA
D	233	Diode	MA152WA
D	261	Diode	MA152WK
D	262	Diode	MA152WK
D	263	Diode	MA152WK
D	401	Diode	MA152WK
D	551	Diode	MA3047(M)
D	681	Diode	ERA15-02VH
D	682	Diode	ERA15-02VH
D	803	Diode	MA3062(M)
D	804	Diode	DA204K
D	805	Diode	DA204K
D	806	Diode	DA204K
D	807	Diode	DA204K
D	808	Diode	MA3062(M)
D	809	Diode	DA204K
D	810	Diode	ERA15-02VH
D	851	Diode	MA3075(H)
D	852	Diode	1SS133
D	853	Diode	1SS133
D	871	Diode	MA152WK
D	901	Diode	ERA15-02VH
D	902	Diode	ERA15-02VH
D	911	Diode	HZS6L(B1)
D	912	Diode	ERA15-02VH
D	921	Diode	ERA15-02VH
D	922	Diode	ERA15-02VH
D	931	Diode	ERA15-02VH
D	932	Diode	ERA15-02VH
D	951	Diode	ERA15-02VH
D	952	Diode	HZS7L(C3)
D	953	Diode	HZS7L(A1)
D	961	Diode	MA152WK
D	971	Diode	MA152WK
D	991	Diode	HZS9L(B1)
L	101	Inductor	LAU3R3K
L	141	Inductor	CTF1420
L	221	Inductor	CTF1295
L	222	Inductor	LCTB2R2K2125
L	223	Ferri-Inductor	LAU1R0M
L	401	Ferri-Inductor	LAU2R2K
L	403	Inductor	LAU2R2K
L	501	High Loss Inductor	CTF1410
L	551	Inductor	CTF1295
L	581	High Loss Inductor	CTF1410
L	601	High Loss Inductor	CTF1410
L	602	High Loss Inductor	CTF1410
L	603	High Loss Inductor	CTF1410
L	651	High Loss Inductor	CTF1410
L	652	Inductor	CTF1295
L	671	Inductor	CTF1295
L	801	High Loss Inductor	CTF1410
L	961	Ferri-Inductor	LAU2R2K

Circuit Symbol and No.		Part Name	Part No.
TH	651	Thermistor	CCX1037
X	401	Crystal Resonator 7.200MHz	CSS1379
X	501	Crystal Resonator 4.332MHz	CSS1056
X	601	Resonator 12.58291MHz	CSS1402
X	651	Resonator 4.19MHz	CSS1436
S	601	Slide Switch(PRO/STD)	CSH1048
IL	801	Lamp 14V40mA	CEL1359
		High Out Unit	CWX2215
		DSP Unit	CWX2213
		FM/AM Tuner Unit	CWE1472
BZ	601	Buzzer	CPV1012
FU	801	IC Protector 0.4A	ICP-N10

RESISTORS

R	101		RS1/10S620J
R	102		RS1/10S101J
R	103		RS1/10S101J
R	104		RS1/10S222J
R	105		RS1/10S103J
R	106		RS1/10S102J
R	107		RS1/10S102J
R	108		RS1/10S473J
R	109		RS1/10S473J
R	110		RS1/10S223J
R	111		RS1/10S181J
R	112		RS1/10S102J
R	113		RS1/10S102J
R	114		RS1/10S181J
R	115		RS1/10S223J
R	116		RS1/10S332J
R	117		RS1/10S562J
R	118		RS1/10S472J
R	131		RS1/10S103J
R	132		RS1/10S223J
R	133		RS1/10S473J
R	134		RS1/10S104J
R	135		RS1/10S222J
R	136		RS1/10S561J
R	151		RS1/10S162J
R	152		RS1/10S162J
R	153		RS1/10S0R0J
R	154		RS1/10S0R0J
R	171		RS1/10S393J
R	172		RS1/10S393J
R	173		RS1/10S752J
R	174		RS1/10S752J
R	175		RS1/10S222J
R	176		RS1/10S222J
R	177		RS1/10S473J
R	178		RS1/10S473J
R	179		RS1/10S513J
R	180		RS1/10S513J
R	181		RS1/10S563J
R	182		RS1/10S563J
R	184		RS1/10S103J
R	185		RS1/10S224J
R	186		RS1/10S102J
R	187		RS1/10S102J
R	189		RS1/10S104J
R	190		RS1/10S104J
R	201		RS1/10S472J
R	202		RS1/10S472J
R	203		RS1/10S472J
R	204		RS1/10S472J
R	205		RS1/10S223J
R	206		RS1/10S223J
R	207		RS1/10S331J
R	208		RS1/10S331J
R	209		RS1/10S331J

=====Circuit Symbol and No.		===Part Name	Part No.
R	210		RS1/10S331J
R	227	(RN1/10SE4702D)	GGC1316
R	228	(RN1/10SE4702D)	GGC1316
R	229		RS1/16S102J
R	231		RS1/10S821J
R	232		RS1/10S821J
R	233		RS1/10S821J
R	234		RS1/10S821J
R	235		RS1/10S821J
R	236		RS1/10S821J
R	237		RS1/10S113J
R	238		RS1/10S113J
R	239		RS1/10S113J
R	240		RS1/10S113J
R	241		RS1/10S113J
R	242		RS1/10S113J
R	251		RS1/8S122J
R	252		RS1/10S122J
R	261		RS1/10S223J
R	262		RS1/10S102J
R	401		RS1/10S102J
R	402		RS1/10S103J
R	403		RS1/10S510J
R	404		RS1/10S152J
R	405		RS1/10S472J
R	406		RS1/10S472J
R	407		RS1/10S102J
R	409		RS1/10S472J
R	410		RS1/10S182J
R	411		RS1/10S103J
R	412		RS1/10S0R0J
R	413		RS1/10S152J
R	414		RS1/10S392J
R	415		RS1/10S392J
R	416		RS1/10S102J
R	417		RS1/10S0R0J
R	418		RS1/10S222J
R	419		RS1/10S472J
R	420		RS1/10S562J
R	421		RS1/10S222J
R	422		RS1/10S102J
R	424		RS1/10S222J
R	455		RS1/10S0R0J
R	501		RS1/10S681J
R	503		RS1/10S681J
R	504		RS1/10S105J
R	505		RS1/10S102J
R	506		RS1/16S681J
R	507		RS1/10S222J
R	508		RS1/10S473J
R	509		RS1/10S473J
R	510		RS1/10S681J
R	511		RS1/10S681J
R	512		RS1/10S681J
R	513		RS1/10S681J
R	514		RS1/10S681J
R	515		RS1/10S473J
R	516		RS1/10S473J
R	517		RS1/10S473J
R	518		RS1/10S473J
R	519		RS1/10S473J
R	520		RS1/10S473J
R	551		RS1/10S471J
R	553		RS1/10S102J
R	554		RS1/10S102J
R	555		RS1/10S102J
R	565		RS1/10S0R0J
R	566		RD1/4PU151J
R	601		RS1/10S473J
R	602		RS1/10S473J

=====Circuit Symbol and No.		===Part Name	Part No.
R	603		RS1/10S223J
R	604		RS1/10S473J
R	605		RS1/10S473J
R	606		RS1/10S473J
R	607		RS1/10S473J
R	608		RS1/10S473J
R	609		RS1/16S473J
R	610		RS1/10S102J
R	611		RS1/10S473J
R	612		RS1/10S473J
R	613		RS1/10S681J
R	614		RS1/10S473J
R	617		RS1/10S221J
R	618		RS1/10S221J
R	619		RS1/10S221J
R	620		RS1/10S221J
R	621		RS1/10S221J
R	622		RS1/10S682J
R	623		RS1/10S682J
R	624		RS1/10S682J
R	625		RS1/10S682J
R	626		RS1/10S473J
R	627		RS1/10S393J
R	629		RS1/16S473J
R	630		RS1/10S473J
R	631		RS1/10S102J
R	632		RS1/10S202J
R	634		RS1/10S473J
R	635		RS1/10S473J
R	636		RA3C681J
R	637		RS1/10S473J
R	638		RS1/10S473J
R	639		RS1/10S473J
R	640		RS1/10S473J
R	641		RS1/10S473J
R	642		RS1/10S102J
R	644		RS1/10S473J
R	645		RS1/10S473J
R	646		RS1/10S473J
R	647		RS1/10S473J
R	649		RS1/10S221J
R	650		RS1/10S682J
R	655		RS1/10S222J
R	656		RS1/10S222J
R	657		RS1/10S473J
R	658		RS1/10S473J
R	659	(RN1/10SE9102D)	GGC1317
R	662		RS1/10S222J
R	663		RS1/10S473J
R	664		RS1/10S103J
R	665	(RN1/10SE2402D)	GGC1318
R	671		RS1/10S681J
R	672		RS1/10S102J
R	673		RS1/10S102J
R	674		RS1/10S102J
R	675		RS1/10S681J
R	676		RS1/10S681J
R	677		RS1/10S681J
R	678		RS1/10S681J
R	681		RS1/8S102J
R	682		RS1/8S102J
R	683		RS1/8S102J
R	684		RS1/10S103J
R	685		RS1/10S103J
R	686		RS1/10S103J
R	687		RS1/10S223J
R	688		RS1/10S223J
R	689		RS1/10S223J
R	690		RS1/10S272J
R	691		RS1/10S223J

Circuit Symbol and No.	Part Name	Part No.
R 692		RS1/10S272J
R 693		RS1/10S223J
R 694		RS1/10S272J
R 695		RS1/10S473J
R 696		RS1/10S473J
R 697		RS1/10S473J
R 698		RS1/8S331J
R 700		RS1/10S274J
R 801		RD1/4PU102J
R 802		RS1/8S103J
R 803		RS1/10S224J
R 804		RS1/10S222J
R 805		RD1/4PU102J
R 806		RS1/10S104J
R 807		RS1/10S222J
R 809		RS1/10S1R0J
R 810		RS1/10S103J
R 811		RS1/10S104J
R 815		RS1/10S222J
R 816		RS1/8S222J
R 817		RS1/10S222J
R 818		RS1/8S222J
R 819		RS1/8S103J
R 820		RS2PMF330J
R 821		RS1/8S472J
R 830		RS1/10S102J
R 851		RD1/4PU561J
R 852		RS1/10S102J
R 853		RS1/10S102J
R 854		RS1/10S102J
R 855		RS1/10S102J
R 856		RS1/10S473J
R 857		RS1/10S473J
R 859		RS1/10S0R0J
R 871		RS1/10S102J
R 872		RD1/4PU102J
R 873		RS1/10S473J
R 911		RS1/8S0R0J
R 912		RS1/10S392J
R 913		RS1/10S752J
R 921		RS1/10S472J
R 922		RD1/4PU221J
R 923		RD1/4PU221J
R 931		RS1/10S472J
R 932		RD1/4PU221J
R 933		RD1/4PU221J
R 941		RS1/10S102J
R 942		RS1/10S102J
R 943		RS1/10S472J
R 951		RS1/10S103J
R 952		RS1/10S103J
R 953		RS1/10S473J
R 954		RS1/10S472J
R 955		RS1/10S473J
R 956		RS1/10S103J
R 961		RS1/8S153J
R 962		RS1/10S472J
R 963		RS1/10S472J
R 964		RS1/10S102J
R 971		RS1/10S822J
R 973		RS1/10S102J
R 974		RS1/10S473J
R 975		RS1/10S472J
R 991		RD1/4PU221J
R 992		RS1/10S221J
R 993		RS1/10S472J
R 994		RS1/10S222J

CAPACITORS

Circuit Symbol and No.	Part Name	Part No.
C 101		CKSQYB104K16
C 102		CKSQYB104K16
C 103		CEJA1R0M50
C 104		CEJA1R0M50
C 105		CEJA100M16
C 106		CEJA100M16
C 107		CEJA1R0M50
C 108		CEJA1R0M50
C 109		CKSQYB102K50
C 131		CKSQYB681K50
C 132		CEJA101M10
C 141		CCSQCH101J50
C 151		CKSQYB473K50
C 152		CKSQYB473K50
C 171		CEJA1R0M50
C 172		CEJA1R0M50
C 173		CEV4R7M25
C 174		CEV4R7M25
C 175		CCSQCH820J50
C 176		CCSQCH820J50
C 177		CCSQCH390J50
C 178		CCSQCH390J50
C 179		CCSQCH390J50
C 180		CCSQCH390J50
C 182		CEJA1R0M50
C 183		CEJA220M6R3
C 184		CEJA101M10
C 185		CEJA100M16
C 186		CKSQYB223K50
C 201		CEJA4R7M35
C 202		CEJA4R7M35
C 203		CEJA100M16
C 204		CEJA100M16
C 205		CKSQYB104K16
C 206		CKSQYB104K16
C 207		CEJA100M16
C 208		CEJA100M16
C 217		CCSQCH221J50
C 218		CCSQCH101J50
C 227		CKSQYB103K50
C 229		CEJANP100M10
C 230		CKSYB475K10
C 231		CEZA4R7M25
C 232		CEZA4R7M25
C 233		CEZA4R7M25
C 234		CEZA4R7M25
C 235		CEZA100M16
C 236		CEZA100M16
C 237		CCSQCH221J50
C 238		CCSQCH221J50
C 239		CCSQCH221J50
C 240		CCSQCH221J50
C 241		CCSQCH221J50
C 242		CCSQCH221J50
C 307		CKSQYB104K16
C 308	3300µF/16V	CCH1125
C 351		CCSQCH221J50
C 352		CCSQCH101J50
C 353		CKSYB475K10
C 401		CKSQYB103K50
C 402		CKSQYB103K50
C 403		CKSQYB103K50
C 404		CKSQYB103K50
C 405		CEV220M10
C 406		CKSQYB103K50

=====Circuit Symbol and No.		===Part Name	Part No.
C	407		CEV220M10
C	408		CKSQYB103K50
C	409		CKSQYB103K50
C	410		CEV220M6R3
C	411		CKSQYB103K50
C	412		CKSQYB154K16
C	414		CKSQYB103K50
C	416		CKLSR473K16
C	417	4.7µF/16V	CCH1250
C	418		CKSQYB103K50
C	420		CCSQCH150J50
C	421		CCSQCH150J50
C	422		CKSQYB103K50
C	423		CKSQYB103K50
C	424		CCSQCH101J50
C	425		CKSQYB473K16
C	426		CEV220M6R3
C	427		CKSQYB103K50
C	428		CKSQYB103K50
C	430		CKSQYB103K50
C	433		CKSQYB103K50
C	434		CKSQYB223K50
C	435		CKSQYB223K50
C	501		CEJA100M16
C	502		CKSQYB103K50
C	503		CCSQCH270J50
C	504		CCSQCH270J50
C	505		CKSYB475K10
C	506		CCSQCH101J50
C	553		CKSQYB102K50
C	556		CKSQYB472K50
C	557		CKSQYB104K16
C	558		CKSQYB105K10
C	561		CCSQCH101J50
C	562		CEJA100M16
C	581		CEJA100M16
C	582		CKSQYB102K50
C	601		CCSQCH200J50
C	602		CCSQCH200J50
C	603		CCSQCH101J50
C	604		CEJA101M10
C	605		CKSQYB103K50
C	606		CCSQCH101J50
C	607		CCSQCH101J50
C	608		CCSQCH101J50
C	609		CEJA100M16
C	610		CKSQYB104K16
C	615		CCSQCH101J50
C	617		CCSQCH101J50
C	618		CCSQCH101J50
C	619		CCSQCH101J50
C	620		CCSRCH101J50
C	651		CKSYB475K10
C	653		CKSQYB102K50
C	654		CKSQYB104K16
C	671		CKSQYB103K50
C	672		CEZA100M16
C	681		CKSQYB473K16
C	682		CKSQYB473K16
C	683		CKSQYB103K50
C	684		CKSQYB103K50
C	685		CKSQYB103K50
C	686		CKSQYB473K16
C	803		CKSQYB103K50
C	806		CKSYB475K10
C	807		CCSQCH101J50
C	808		CEJA101M16
C	809		CCSQCH101J50
C	851		CKSQYB103K50
C	852		CKSYB475K10

=====Circuit Symbol and No.		===Part Name	Part No.
C	853		CKSQYB102K50
C	854		CCSQCH101J50
C	855		CCSQCH101J50
C	856		CKSQYB102K50
C	871	470µF/16V	CCH1183
C	872		CEZA100M16
C	873		CKSQYB103K50
C	874		CKSQYB102K50
C	876		CASA4R7M10
C	911	1500µF/16V	CCH1312
C	912		CKSQYB472K50
C	913		CKSQYB103K50
C	914		CASA470M10
C	921		CKSQYB103K50
C	941		CKSQYB102K50
C	942	330µF/10V	CCH1181
C	943		CEZA470M25
C	944		CEJA1R0M50
C	945		CEJA101M10
C	946		CEJA470M10
C	947		CKSQYB102K50
C	951		CKSQYB105K10
C	952		CCSQCH101J50
C	971		CEJA2R2M50
C	972		CKSQYB102K50
C	973		CKSQYB104K16
C	991		CKSQYB473K16
C	992		CKSQYB102K50
C	993		CEJA101M10

A Unit Number : CWM5697(DEH-P946/ES)
Unit Name : Tuner Amp Unit

MISCELLANEOUS

IC	101	IC	CA0008AM
IC	102	IC	TA2050S
IC	171	IC	BA3131FS
IC	301	IC	TDA7386
IC	401	IC	PM2006A
IC	601	IC	PD4906A
IC	651	IC	PD4931A
IC	671	IC	PD0236AM
IC	851	IC	BA6288FS
IC	871	IC	NJM78M05FA
IC	941	IC	PA2024A
IC	971	IC	S-80730ANDT
Q	101	Transistor	2SA1162
Q	102	Transistor	UN2212
Q	131	Transistor	2SC2712
Q	132	Transistor	IMD2A
Q	171	Transistor	DTC314TK
Q	172	Transistor	DTC314TK
Q	231	Transistor	FMG13
Q	232	Transistor	FMG13
Q	233	Transistor	FMG13
Q	261	Transistor	IMD2A
Q	301	Transistor	UN2212
Q	302	Transistor	UN2212
Q	401	Transistor	2SC2712
Q	601	Transistor	UN2111
Q	602	Transistor	UN2211
Q	651	Transistor	UN2112
Q	681	Transistor	2SA1162
Q	682	Transistor	UN2212
Q	683	Transistor	2SC2712
Q	684	Transistor	2SC2712
Q	685	Transistor	2SC2712
Q	802	Transistor	2SC2712
Q	803	Transistor	UN2211

=====Circuit Symbol and No.		===Part Name	Part No.
Q	804	Transistor	2SD1760F5
Q	805	Transistor	UN2111
Q	806	Transistor	2SB1238
Q	807	Transistor	2SB1238
Q	808	Transistor	DTC143EK
Q	810	Transistor	2SC2712
Q	811	Transistor	2SC2712
Q	812	Transistor	DTA144EK
Q	851	Transistor	2SD1760F5
Q	852	Transistor	UN2111
Q	853	Transistor	UN2212
Q	871	Transistor	2SB1238
Q	872	Transistor	DTC123EK
Q	911	Transistor	2SD1760F5
Q	913	Transistor	IMD2A
Q	921	Transistor	2SB1243
Q	922	Transistor	UN2212
Q	931	Transistor	2SB1243
Q	932	Transistor	UN2212
Q	951	Transistor	UN2211
Q	952	Transistor	IMX1
Q	961	Transistor	2SA1162
Q	971	Transistor	2SC2712
Q	991	Transistor	IMD2A
Q	992	Transistor	2SD2396
D	131	Diode	MA3039(L)
D	231	Diode	MA152WA
D	232	Diode	MA152WA
D	233	Diode	MA152WA
D	261	Diode	MA152WK
D	262	Diode	MA152WK
D	263	Diode	MA152WK
D	401	Diode	MA152WK
D	803	Diode	MA3062(M)
D	804	Diode	DA204K
D	805	Diode	DA204K
D	806	Diode	DA204K
D	807	Diode	DA204K
D	808	Diode	MA3062(M)
D	809	Diode	DA204K
D	810	Diode	ERA15-02VH
D	851	Diode	MA3075(H)
D	852	Diode	1SS133
D	853	Diode	1SS133
D	871	Diode	MA152WK
D	901	Diode	ERA15-02VH
D	902	Diode	ERA15-02VH
D	911	Diode	HZS6L(B1)
D	912	Diode	ERA15-02VH
D	921	Diode	ERA15-02VH
D	922	Diode	ERA15-02VH
D	931	Diode	ERA15-02VH
D	932	Diode	ERA15-02VH
D	951	Diode	ERA15-02VH
D	952	Diode	HZS7L(C3)
D	953	Diode	HZS7L(A1)
D	961	Diode	MA152WK
D	971	Diode	MA152WK
D	991	Diode	HZS9L(B1)
L	101	Inductor	LAU3R3K
L	141	Inductor	CTF1420
L	221	Inductor	CTF1295
L	222	Inductor	LCTB2R2K2125
L	223	Ferri-Inductor	LAU1R0M
L	401	Ferri-Inductor	LAU2R2K
L	403	Inductor	LAU2R2K
L	601	High Loss Inductor	CTF1410
L	602	High Loss Inductor	CTF1410
L	603	High Loss Inductor	CTF1410
L	651	High Loss Inductor	CTF1410

=====Circuit Symbol and No.		===Part Name	Part No.
L	652	Inductor	CTF1295
L	671	Inductor	CTF1295
L	801	High Loss Inductor	CTF1410
L	961	Ferri-Inductor	LAU2R2K
TH	651	Thermistor	CCX1037
X	401	Crystal Resonator 7.200MHz	CSS1379
X	601	Resonator 12.58291MHz	CSS1402
X	651	Resonator 4.19MHz	CSS1436
S	601	Slide Switch(PRO/STD)	CSH1048
IL	801	Lamp 14V40mA	CEL1359
		DSP Unit	CWX2213
		FM/AM Tuner Unit	CWE1485
BZ	601	Buzzer	CPV1012
FU	801	IC Protector 0.4A	ICP-N10

RESISTORS

R	101	RS1/10S620J
R	102	RS1/10S101J
R	103	RS1/10S101J
R	104	RS1/10S222J
R	105	RS1/10S103J
R	106	RS1/10S102J
R	107	RS1/10S102J
R	108	RS1/10S473J
R	109	RS1/10S473J
R	110	RS1/10S223J
R	111	RS1/10S181J
R	112	RS1/10S102J
R	113	RS1/10S102J
R	114	RS1/10S181J
R	115	RS1/10S223J
R	116	RS1/10S332J
R	117	RS1/10S562J
R	118	RS1/10S472J
R	131	RS1/10S103J
R	132	RS1/10S223J
R	133	RS1/10S473J
R	134	RS1/10S104J
R	135	RS1/10S222J
R	136	RS1/10S561J
R	151	RS1/10S162J
R	152	RS1/10S162J
R	153	RS1/10S0R0J
R	154	RS1/10S0R0J
R	171	RS1/10S393J
R	172	RS1/10S393J
R	173	RS1/10S752J
R	174	RS1/10S752J
R	175	RS1/10S222J
R	176	RS1/10S222J
R	177	RS1/10S473J
R	178	RS1/10S473J
R	179	RS1/10S513J
R	180	RS1/10S513J
R	181	RS1/10S563J
R	182	RS1/10S563J
R	184	RS1/10S103J
R	185	RS1/10S224J
R	186	RS1/10S102J
R	187	RS1/10S102J
R	189	RS1/10S104J
R	190	RS1/10S104J
R	201	RS1/10S472J
R	202	RS1/10S472J
R	203	RS1/10S472J
R	204	RS1/10S472J
R	205	RS1/10S223J
R	206	RS1/10S223J
R	207	RS1/10S331J
R	208	RS1/10S331J
R	209	RS1/10S331J

Circuit Symbol and No.		Part Name	Part No.
R	210		RS1/10S331J
R	227	(RN1/10SE4702D)	GGC1316
R	228	(RN1/10SE4702D)	GGC1316
R	229		RS1/16S102J
R	231		RS1/10S821J
R	232		RS1/10S821J
R	233		RS1/10S821J
R	234		RS1/10S821J
R	235		RS1/10S821J
R	236		RS1/10S821J
R	237		RS1/10S223J
R	238		RS1/10S223J
R	239		RS1/10S223J
R	240		RS1/10S223J
R	241		RS1/10S223J
R	242		RS1/10S223J
R	261		RS1/10S223J
R	262		RS1/10S102J
R	301		RS1/10S103J
R	302		RS1/10S331J
R	303		RS1/10S103J
R	304		RS1/10S103J
R	401		RS1/10S102J
R	402		RS1/10S103J
R	403		RS1/10S510J
R	404		RS1/10S152J
R	405		RS1/10S472J
R	406		RS1/10S472J
R	407		RS1/10S102J
R	409		RS1/10S472J
R	410		RS1/10S182J
R	411		RS1/10S103J
R	412		RS1/10S0R0J
R	413		RS1/10S152J
R	414		RS1/10S392J
R	415		RS1/10S392J
R	416		RS1/10S102J
R	418		RS1/10S222J
R	419		RS1/10S222J
R	420		RS1/10S562J
R	421		RS1/10S222J
R	422		RS1/10S102J
R	424		RS1/10S222J
R	430		RS1/10S182J
R	455		RS1/10S0R0J
R	601		RS1/10S473J
R	602		RS1/10S473J
R	603		RS1/10S223J
R	607		RS1/10S473J
R	610		RS1/10S102J
R	611		RS1/10S473J
R	612		RS1/10S473J
R	613		RS1/10S681J
R	614		RS1/10S473J
R	617		RS1/10S221J
R	618		RS1/10S221J
R	619		RS1/10S221J
R	620		RS1/10S221J
R	621		RS1/10S221J
R	622		RS1/10S682J
R	623		RS1/10S682J
R	624		RS1/10S682J
R	625		RS1/10S682J
R	626		RS1/10S473J
R	627		RS1/10S393J
R	628		RS1/16S473J
R	630		RS1/10S473J
R	631		RS1/10S102J
R	632		RS1/10S202J
R	634		RS1/10S473J

Circuit Symbol and No.		Part Name	Part No.
R	635		RS1/10S473J
R	636		RA3C681J
R	637		RS1/10S473J
R	638		RS1/10S473J
R	640		RS1/10S473J
R	641		RS1/10S473J
R	642		RS1/10S102J
R	644		RS1/10S473J
R	645		RS1/10S473J
R	646		RS1/10S473J
R	647		RS1/10S473J
R	648		RS1/10S473J
R	649		RS1/10S221J
R	650		RS1/10S682J
R	655		RS1/10S222J
R	656		RS1/10S222J
R	657		RS1/10S473J
R	658		RS1/10S473J
R	659	(RN1/10SE9102D)	GGC1317
R	662		RS1/10S222J
R	663		RS1/10S473J
R	664		RS1/10S103J
R	665	(RN1/10SE2402D)	GGC1318
R	671		RS1/10S681J
R	672		RS1/10S102J
R	673		RS1/10S102J
R	674		RS1/10S102J
R	675		RS1/10S681J
R	676		RS1/10S681J
R	677		RS1/10S681J
R	678		RS1/10S681J
R	681		RS1/8S102J
R	682		RS1/8S102J
R	683		RS1/8S102J
R	685		RS1/10S103J
R	686		RS1/10S103J
R	687		RS1/10S223J
R	688		RS1/10S223J
R	689		RS1/10S223J
R	690		RS1/10S272J
R	691		RS1/10S223J
R	692		RS1/10S272J
R	693		RS1/10S223J
R	694		RS1/10S272J
R	695		RS1/10S473J
R	696		RS1/10S473J
R	697		RS1/10S473J
R	698		RS1/8S331J
R	700		RS1/10S274J
R	801		RD1/4PU102J
R	802		RS1/8S103J
R	803		RS1/10S224J
R	804		RS1/10S222J
R	805		RD1/4PU102J
R	806		RS1/10S104J
R	807		RS1/10S222J
R	809		RS1/10S1R0J
R	810		RS1/10S103J
R	811		RS1/10S104J
R	815		RS1/10S222J
R	816		RS1/8S222J
R	817		RS1/10S222J
R	818		RS1/8S222J
R	819		RS1/8S103J
R	820		RS2PMF330J
R	821		RS1/8S472J
R	830		RS1/10S102J
R	851		RD1/4PU561J
R	852		RS1/10S102J
R	853		RS1/10S102J

=====Circuit Symbol and No.		===Part Name	Part No.
R	854		RS1/10S102J
R	855		RS1/10S102J
R	856		RS1/10S473J
R	857		RS1/10S473J
R	859		RS1/10S0R0J
R	871		RS1/10S102J
R	872		RD1/4PU102J
R	873		RS1/10S473J
R	911		RS1/8S0R0J
R	912		RS1/10S392J
R	913		RS1/10S752J
R	921		RS1/10S472J
R	922		RD1/4PU221J
R	923		RD1/4PU221J
R	931		RS1/10S472J
R	932		RD1/4PU221J
R	933		RD1/4PU221J
R	941		RS1/10S102J
R	942		RS1/10S102J
R	943		RS1/10S472J
R	951		RS1/10S103J
R	952		RS1/10S103J
R	953		RS1/10S473J
R	954		RS1/10S472J
R	955		RS1/10S473J
R	956		RS1/10S103J
R	961		RS1/8S153J
R	962		RS1/10S472J
R	963		RS1/10S472J
R	964		RS1/10S102J
R	971		RS1/10S822J
R	973		RS1/10S102J
R	974		RS1/10S473J
R	975		RS1/10S472J
R	991		RD1/4PU221J
R	992		RS1/10S221J
R	993		RS1/10S472J
R	994		RS1/10S222J
CAPACITORS			
C	101		CKSQYB104K16
C	102		CKSQYB104K16
C	103		CEJA1R0M50
C	104		CEJA1R0M50
C	105		CEJA100M16
C	106		CEJA100M16
C	107		CEJA1R0M50
C	108		CEJA1R0M50
C	109		CKSQYB102K50
C	131		CKSQYB681K50
C	132		CEJA101M10
C	141		CCSQCH101J50
C	151		CKSQYB473K50
C	152		CKSQYB473K50
C	171		CEJA1R0M50
C	172		CEJA1R0M50
C	173		CEV4R7M25
C	174		CEV4R7M25
C	175		CCSQCH820J50
C	176		CCSQCH820J50
C	177		CCSQCH390J50
C	178		CCSQCH390J50
C	179		CCSQCH390J50
C	180		CCSQCH390J50
C	182		CEJA1R0M50
C	183		CEJA220M6R3
C	184		CEJA101M10
C	185		CEJA100M16
C	186		CKSQYB223K50
C	201		CEJA4R7M35

=====Circuit Symbol and No.		===Part Name	Part No.
C	202		CEJA4R7M35
C	203		CEJA100M16
C	204		CEJA100M16
C	205		CKSQYB104K16
C	206		CKSQYB104K16
C	207		CEJA100M16
C	208		CEJA100M16
C	217		CCSQCH221J50
C	218		CCSQCH101J50
C	227		CKSQYB103K50
C	229		CEJANP100M10
C	230		CKSYB475K10
C	231		CEJA4R7M35
C	232		CEJA4R7M35
C	233		CEJA4R7M35
C	234		CEJA4R7M35
C	235		CEJA100M16
C	236		CEJA100M16
C	237		CCSQCH221J50
C	238		CCSQCH221J50
C	239		CCSQCH221J50
C	240		CCSQCH221J50
C	241		CCSQCH221J50
C	242		CCSQCH221J50
C	301		CKSYB224K16
C	302		CKSYB224K16
C	303		CKSYB224K16
C	304		CKSYB224K16
C	305		CKSYB105K16
C	306		CEHAR100M16
C	308	3300µF/16V	CCH1125
C	309		CEHAR010M50
C	310		CEHAR330M10
C	351		CCSQCH221J50
C	352		CCSQCH101J50
C	353		CKSYB475K10
C	401		CKSQYB103K50
C	402		CKSQYB103K50
C	403		CKSQYB103K50
C	404		CKSQYB103K50
C	405		CEV220M10
C	406		CKSQYB103K50
C	407		CEV220M10
C	408		CKSQYB103K50
C	409		CKSQYB103K50
C	410		CEV220M6R3
C	411		CKSQYB103K50
C	412		CKSQYB154K16
C	414		CKSQYB103K50
C	416		CKLSR473K16
C	417	4.7µF/16V	CCH1250
C	418		CKSQYB103K50
C	420		CCSQCH150J50
C	421		CCSQCH150J50
C	422		CKSQYB103K50
C	423		CKSQYB103K50
C	424		CCSQCH101J50
C	425		CKSQYB473K16
C	426		CEV220M6R3
C	427		CKSQYB103K50
C	428		CKSQYB103K50
C	430		CKSQYB103K50
C	432		CKSQYB103K50
C	433		CKSQYB103K50
C	434		CKSQYB223K50
C	435		CKSQYB223K50
C	601		CCSQCH200J50
C	602		CCSQCH200J50
C	603		CCSQCH101J50
C	604		CEJA101M10

=====Circuit Symbol and No.		===Part Name	Part No.
C	605		CKSQYB103K50
C	606		CCSQCH101J50
C	607		CCSQCH101J50
C	608		CCSQCH101J50
C	609		CEJA100M16
C	610		CKSQYB104K16
C	615		CCSQCH101J50
C	617		CCSQCH101J50
C	618		CCSQCH101J50
C	619		CCSQCH101J50
C	620		CCSRCH101J50
C	651		CKSYB475K10
C	653		CKSQYB102K50
C	654		CKSQYB104K16
C	671		CKSQYB103K50
C	672		CEJA100M16
C	683		CKSQYB103K50
C	684		CKSQYB103K50
C	685		CKSQYB103K50
C	686		CKSQYB473K16
C	803		CKSQYB103K50
C	806		CKSYB475K10
C	807		CCSQCH101J50
C	808		CEJA101M16
C	809		CCSQCH101J50
C	851		CKSQYB103K50
C	852		CKSYB475K10
C	853		CKSQYB102K50
C	854		CCSQCH101J50
C	855		CCSQCH101J50
C	856		CKSQYB102K50
C	871	470µF/16V	CCH1183
C	872		CEJA100M16
C	873		CKSQYB103K50
C	874		CKSQYB102K50
C	876		CASA4R7M10
C	911	1500µF/16V	CCH1312
C	912		CKSQYB472K50
C	913		CKSQYB103K50
C	914		CASA470M10
C	921		CKSQYB103K50
C	941		CKSQYB102K50
C	942	330µF/10V	CCH1181
C	943		CEJA470M10
C	944		CEJA1R0M50
C	945		CEJA101M10
C	946		CEJA470M10
C	947		CKSQYB102K50
C	951		CKSQYB105K10
C	952		CCSQCH101J50
C	971		CEJA2R2M50
C	972		CKSQYB102K50
C	973		CKSQYB104K16
C	991		CKSQYB473K16
C	992		CKSQYB102K50
C	993		CEJA101M10

A Unit Number : CWM5699(DEX-P1/ES)
Unit Name : Tuner Amp Unit

MISCELLANEOUS

IC	101	IC	CA0008AM
IC	102	IC	TA2050S
IC	171	IC	BA3131FS
IC	401	IC	PM2006A
IC	601	IC	PD4906A
IC	651	IC	PD4931A
IC	671	IC	PD0236AM
IC	851	IC	BA6288FS
IC	871	IC	NJM78M05FA
IC	941	IC	PA2024A

=====Circuit Symbol and No.		===Part Name	Part No.
IC	971	IC	S-80730ANDT
Q	101	Transistor	2SA1162
Q	102	Transistor	UN2212
Q	131	Transistor	2SC2712
Q	132	Transistor	IMD2A
Q	171	Transistor	DTC314TK
Q	172	Transistor	DTC314TK
Q	231	Transistor	FMG13
Q	232	Transistor	FMG13
Q	233	Transistor	FMG13
Q	251	Transistor	DTA143EK
Q	252	Transistor	UN2211
Q	253	Transistor	IMD2A
Q	261	Transistor	IMD2A
Q	401	Transistor	2SC2712
Q	601	Transistor	UN2111
Q	602	Transistor	UN2211
Q	651	Transistor	UN2112
Q	681	Transistor	2SA1162
Q	682	Transistor	UN2212
Q	683	Transistor	2SC2712
Q	684	Transistor	2SC2712
Q	685	Transistor	2SC2712
Q	802	Transistor	2SC2712
Q	803	Transistor	UN2211
Q	804	Transistor	2SD1760F5
Q	805	Transistor	UN2111
Q	806	Transistor	2SB1238
Q	807	Transistor	2SB1238
Q	808	Transistor	DTC143EK
Q	810	Transistor	2SC2712
Q	811	Transistor	2SC2712
Q	812	Transistor	DTA144EK
Q	851	Transistor	2SD1760F5
Q	852	Transistor	UN2111
Q	853	Transistor	UN2212
Q	871	Transistor	2SB1238
Q	872	Transistor	DTC123EK
Q	911	Transistor	2SD1760F5
Q	913	Transistor	IMD2A
Q	921	Transistor	2SB1243
Q	922	Transistor	UN2212
Q	931	Transistor	2SB1243
Q	932	Transistor	UN2212
Q	951	Transistor	UN2211
Q	952	Transistor	IMX1
Q	961	Transistor	2SA1162
Q	971	Transistor	2SC2712
Q	991	Transistor	IMD2A
Q	992	Transistor	2SD2396
D	131	Diode	MA3039(L)
D	231	Diode	MA152WA
D	232	Diode	MA152WA
D	233	Diode	MA152WA
D	261	Diode	MA152WK
D	262	Diode	MA152WK
D	263	Diode	MA152WK
D	401	Diode	MA152WK
D	803	Diode	MA3062(M)
D	804	Diode	DA204K
D	805	Diode	DA204K
D	806	Diode	DA204K
D	807	Diode	DA204K
D	808	Diode	MA3062(M)
D	809	Diode	DA204K
D	810	Diode	ERA15-02VH
D	851	Diode	MA3075(H)
D	852	Diode	1SS133
D	853	Diode	1SS133
D	871	Diode	MA152WK

=====Circuit Symbol and No.		===Part Name	Part No.
D	901	Diode	ERA15-02VH
D	902	Diode	ERA15-02VH
D	911	Diode	HZS6L(B1)
D	912	Diode	ERA15-02VH
D	921	Diode	ERA15-02VH
D	922	Diode	ERA15-02VH
D	931	Diode	ERA15-02VH
D	932	Diode	ERA15-02VH
D	951	Diode	ERA15-02VH
D	952	Diode	HZS7L(C3)
D	953	Diode	HZS7L(A1)
D	961	Diode	MA152WK
D	971	Diode	MA152WK
D	991	Diode	HZS9L(B1)
L	101	Inductor	LAU3R3K
L	141	Inductor	CTF1420
L	221	Inductor	CTF1295
L	222	Inductor	LCTB2R2K2125
L	223	Ferri-Inductor	LAU1R0M
L	401	Ferri-Inductor	LAU2R2K
L	403	Inductor	LAU2R2K
L	601	High Loss Inductor	CTF1410
L	602	High Loss Inductor	CTF1410
L	603	High Loss Inductor	CTF1410
L	651	High Loss Inductor	CTF1410
L	652	Inductor	CTF1295
L	671	Inductor	CTF1295
L	801	High Loss Inductor	CTF1410
L	961	Ferri-Inductor	LAU2R2K
TH	651	Thermistor	CCX1037
X	401	Crystal Resonator 7.200MHz	CSS1379
X	601	Resonator 12.58291MHz	CSS1402
X	651	Resonator 4.19MHz	CSS1436
S	601	Slide Switch(PRO/STD)	CSH1048
IL	801	Lamp 14V40mA	CEL1359
		High Out Unit	CWX2215
		DSP Unit	CWX2213
		FM/AM Tuner Unit	CWE1485
BZ	601	Buzzer	CPV1012
FU	801	IC Protector 0.4A	ICP-N10

RESISTORS

R	101		RS1/10S620J
R	102		RS1/10S101J
R	103		RS1/10S101J
R	104		RS1/10S222J
R	105		RS1/10S103J
R	106		RS1/10S102J
R	107		RS1/10S102J
R	108		RS1/10S473J
R	109		RS1/10S473J
R	110		RS1/10S223J
R	111		RS1/10S181J
R	112		RS1/10S102J
R	113		RS1/10S102J
R	114		RS1/10S181J
R	115		RS1/10S223J
R	116		RS1/10S332J
R	117		RS1/10S562J
R	118		RS1/10S472J
R	131		RS1/10S103J
R	132		RS1/10S223J
R	133		RS1/10S473J
R	134		RS1/10S104J
R	135		RS1/10S222J
R	136		RS1/10S561J
R	151		RS1/10S162J
R	152		RS1/10S162J
R	153		RS1/10S0R0J
R	154		RS1/10S0R0J
R	171		RS1/10S393J
R	172		RS1/10S393J
R	173		RS1/10S752J
R	174		RS1/10S752J
R	175		RS1/10S222J
R	176		RS1/10S222J
R	177		RS1/10S473J
R	178		RS1/10S473J
R	179		RS1/10S513J
R	180		RS1/10S513J
R	181		RS1/10S563J
R	182		RS1/10S563J
R	184		RS1/10S103J
R	185		RS1/10S224J
R	186		RS1/10S102J
R	187		RS1/10S102J
R	189		RS1/10S104J
R	190		RS1/10S104J
R	201		RS1/10S472J
R	202		RS1/10S472J
R	203		RS1/10S472J
R	204		RS1/10S472J
R	205		RS1/10S223J
R	206		RS1/10S223J
R	207		RS1/10S331J
R	208		RS1/10S331J
R	209		RS1/10S331J
R	210		RS1/10S331J
R	227	(RN1/10SE4702D)	GGC1316
R	228	(RN1/10SE4702D)	GGC1316
R	229		RS1/16S102J
R	231		RS1/10S821J
R	232		RS1/10S821J
R	233		RS1/10S821J
R	234		RS1/10S821J
R	235		RS1/10S821J
R	236		RS1/10S821J
R	237		RS1/10S113J
R	238		RS1/10S113J
R	239		RS1/10S113J
R	240		RS1/10S113J
R	241		RS1/10S113J
R	242		RS1/10S113J
R	251		RS1/8S122J
R	252		RS1/10S122J
R	261		RS1/10S223J
R	262		RS1/10S102J
R	401		RS1/10S102J
R	402		RS1/10S103J
R	403		RS1/10S510J
R	404		RS1/10S152J
R	405		RS1/10S472J
R	406		RS1/10S472J
R	407		RS1/10S102J
R	409		RS1/10S472J
R	410		RS1/10S182J
R	411		RS1/10S103J
R	412		RS1/10S0R0J
R	413		RS1/10S152J
R	414		RS1/10S392J
R	415		RS1/10S392J
R	416		RS1/10S102J
R	418		RS1/10S222J
R	419		RS1/10S222J
R	420		RS1/10S562J
R	421		RS1/10S222J
R	422		RS1/10S102J
R	424		RS1/10S222J
R	430		RS1/10S182J
R	455		RS1/10S0R0J
R	601		RS1/10S473J
R	602		RS1/10S473J

Circuit Symbol and No.		Part Name	Part No.
R	603		RS1/10S223J
R	607		RS1/10S473J
R	610		RS1/10S102J
R	611		RS1/10S473J
R	612		RS1/10S473J
R	613		RS1/10S681J
R	614		RS1/10S473J
R	617		RS1/10S221J
R	618		RS1/10S221J
R	619		RS1/10S221J
R	620		RS1/10S221J
R	621		RS1/10S221J
R	622		RS1/10S682J
R	623		RS1/10S682J
R	624		RS1/10S682J
R	625		RS1/10S682J
R	626		RS1/10S473J
R	627		RS1/10S393J
R	629		RS1/16S473J
R	630		RS1/10S473J
R	631		RS1/10S102J
R	632		RS1/10S202J
R	634		RS1/10S473J
R	635		RS1/10S473J
R	636		RA3C681J
R	637		RS1/10S473J
R	638		RS1/10S473J
R	640		RS1/10S473J
R	641		RS1/10S473J
R	642		RS1/10S102J
R	644		RS1/10S473J
R	645		RS1/10S473J
R	646		RS1/10S473J
R	647		RS1/10S473J
R	648		RS1/10S473J
R	649		RS1/10S221J
R	650		RS1/10S682J
R	655		RS1/10S222J
R	656		RS1/10S222J
R	657		RS1/10S473J
R	658		RS1/10S473J
R	659	(RN1/10SE9102D)	GGC1317
R	662		RS1/10S222J
R	663		RS1/10S473J
R	664		RS1/10S103J
R	665	(RN1/10SE2402D)	GGC1318
R	671		RS1/10S681J
R	672		RS1/10S102J
R	673		RS1/10S102J
R	674		RS1/10S102J
R	675		RS1/10S681J
R	676		RS1/10S681J
R	677		RS1/10S681J
R	678		RS1/10S681J
R	681		RS1/8S102J
R	682		RS1/8S102J
R	683		RS1/8S102J
R	685		RS1/10S103J
R	686		RS1/10S103J
R	687		RS1/10S223J
R	688		RS1/10S223J
R	689		RS1/10S223J
R	690		RS1/10S272J
R	691		RS1/10S223J
R	692		RS1/10S272J
R	693		RS1/10S223J
R	694		RS1/10S272J
R	695		RS1/10S473J
R	696		RS1/10S473J
R	697		RS1/10S473J

Circuit Symbol and No.		Part Name	Part No.
R	698		RS1/8S331J
R	700		RS1/10S274J
R	801		RD1/4PU102J
R	802		RS1/8S103J
R	803		RS1/10S224J
R	804		RS1/10S222J
R	805		RD1/4PU102J
R	806		RS1/10S104J
R	807		RS1/10S222J
R	809		RS1/10S1R0J
R	810		RS1/10S103J
R	811		RS1/10S104J
R	815		RS1/10S222J
R	816		RS1/8S222J
R	817		RS1/10S222J
R	818		RS1/8S222J
R	819		RS1/8S103J
R	820		RS2PMF330J
R	821		RS1/8S472J
R	830		RS1/10S102J
R	851		RD1/4PU561J
R	852		RS1/10S102J
R	853		RS1/10S102J
R	854		RS1/10S102J
R	855		RS1/10S102J
R	856		RS1/10S473J
R	857		RS1/10S473J
R	859		RS1/10S0R0J
R	871		RS1/10S102J
R	872		RD1/4PU102J
R	873		RS1/10S473J
R	911		RS1/8S0R0J
R	912		RS1/10S392J
R	913		RS1/10S752J
R	921		RS1/10S472J
R	922		RD1/4PU221J
R	923		RD1/4PU221J
R	931		RS1/10S472J
R	932		RD1/4PU221J
R	933		RD1/4PU221J
R	941		RS1/10S102J
R	942		RS1/10S102J
R	943		RS1/10S472J
R	951		RS1/10S103J
R	952		RS1/10S103J
R	953		RS1/10S473J
R	954		RS1/10S472J
R	955		RS1/10S473J
R	956		RS1/10S103J
R	961		RS1/8S153J
R	962		RS1/10S472J
R	963		RS1/10S472J
R	964		RS1/10S102J
R	971		RS1/10S822J
R	973		RS1/10S102J
R	974		RS1/10S473J
R	975		RS1/10S472J
R	991		RD1/4PU221J
R	992		RS1/10S221J
R	993		RS1/10S472J
R	994		RS1/10S222J

CAPACITORS

C	101	CKSQYB104K16
C	102	CKSQYB104K16
C	103	CEJA1R0M50
C	104	CEJA1R0M50
C	105	CEJA100M16

=====Circuit Symbol and No.		===Part Name	Part No.
C	106		CEJA100M16
C	107		CEJA1R0M50
C	108		CEJA1R0M50
C	109		CKSQYB102K50
C	131		CKSQYB681K50
C	132		CEJA101M10
C	141		CCSQCH101J50
C	151		CKSQYB473K50
C	152		CKSQYB473K50
C	171		CEJA1R0M50
C	172		CEJA1R0M50
C	173		CEV4R7M25
C	174		CEV4R7M25
C	175		CCSQCH820J50
C	176		CCSQCH820J50
C	177		CCSQCH390J50
C	178		CCSQCH390J50
C	179		CCSQCH390J50
C	180		CCSQCH390J50
C	182		CEJA1R0M50
C	183		CEJA220M6R3
C	184		CEJA101M10
C	185		CEJA100M16
C	186		CKSQYB223K50
C	201		CEJA4R7M35
C	202		CEJA4R7M35
C	203		CEJA100M16
C	204		CEJA100M16
C	205		CKSQYB104K16
C	206		CKSQYB104K16
C	207		CEJA100M16
C	208		CEJA100M16
C	217		CCSQCH221J50
C	218		CCSQCH101J50
C	227		CKSQYB103K50
C	229		CEJANP100M10
C	230		CKSYB475K10
C	231		CEZA4R7M25
C	232		CEZA4R7M25
C	233		CEZA4R7M25
C	234		CEZA4R7M25
C	235		CEZA100M16
C	236		CEZA100M16
C	237		CCSQCH221J50
C	238		CCSQCH221J50
C	239		CCSQCH221J50
C	240		CCSQCH221J50
C	241		CCSQCH221J50
C	242		CCSQCH221J50
C	307		CKSQYB104K16
C	308	3300µF/16V	CCH1125
C	351		CCSQCH221J50
C	352		CCSQCH101J50
C	353		CKSYB475K10
C	401		CKSQYB103K50
C	402		CKSQYB103K50
C	403		CKSQYB103K50
C	404		CKSQYB103K50
C	405		CEV220M10
C	406		CKSQYB103K50
C	407		CEV220M10
C	408		CKSQYB103K50
C	409		CKSQYB103K50
C	410		CEV220M6R3
C	411		CKSQYB103K50
C	412		CKSQYB154K16
C	414		CKSQYB103K50
C	416		CKLSR473K16
C	417	4.7µF/16V	CCH1250
C	418		CKSQYB103K50

=====Circuit Symbol and No.		===Part Name	Part No.
C	420		CCSQCH150J50
C	421		CCSQCH150J50
C	422		CKSQYB103K50
C	423		CKSQYB103K50
C	424		CCSQCH101J50
C	425		CKSQYB473K16
C	426		CEV220M6R3
C	427		CKSQYB103K50
C	428		CKSQYB103K50
C	430		CKSQYB103K50
C	432		CKSQYB103K50
C	433		CKSQYB103K50
C	434		CKSQYB223K50
C	435		CKSQYB223K50
C	601		CCSQCH200J50
C	602		CCSQCH200J50
C	603		CCSQCH101J50
C	604		CEJA101M10
C	605		CKSQYB103K50
C	606		CCSQCH101J50
C	607		CCSQCH101J50
C	608		CCSQCH101J50
C	609		CEJA100M16
C	610		CKSQYB104K16
C	615		CCSQCH101J50
C	617		CCSQCH101J50
C	618		CCSQCH101J50
C	619		CCSQCH101J50
C	620		CCSRCH101J50
C	651		CKSYB475K10
C	653		CKSQYB102K50
C	654		CKSQYB104K16
C	671		CKSQYB103K50
C	672		CEZA100M16
C	683		CKSQYB103K50
C	684		CKSQYB103K50
C	685		CKSQYB103K50
C	686		CKSQYB473K16
C	803		CKSQYB103K50
C	806		CKSYB475K10
C	807		CCSQCH101J50
C	808		CEJA101M16
C	809		CCSQCH101J50
C	851		CKSQYB103K50
C	852		CKSYB475K10
C	853		CKSQYB102K50
C	854		CCSQCH101J50
C	855		CCSQCH101J50
C	856		CKSQYB102K50
C	871	470µF/16V	CCH1183
C	872		CEZA100M16
C	873		CKSQYB103K50
C	874		CKSQYB102K50
C	876		CASA4R7M10
C	911	1500µF/16V	CCH1312
C	912		CKSQYB472K50
C	913		CKSQYB103K50
C	914		CASA470M10
C	921		CKSQYB103K50
C	941		CKSQYB102K50
C	942	330µF/10V	CCH1181
C	943		CEZA470M25
C	944		CEJA1R0M50
C	945		CEJA101M10
C	946		CEJA470M10
C	947		CKSQYB102K50
C	951		CKSQYB105K10
C	952		CCSQCH101J50
C	971		CEJA2R2M50
C	972		CKSQYB102K50

=====Circuit Symbol and No.	===Part Name	Part No.
C 973		CKSQYB104K16
C 991		CKSQYB473K16
C 992		CKSQYB102K50
C 993		CEJA101M10

C Unit Number : CWM5686(DEX-P1R/UC)
Unit Number : CWM5689(DEH-P946/ES,DEX-P1/ES)
Unit Name : Keyboard Unit

MISCELLANEOUS

IC	1901	HIC Module	RS-140
IC	1902	IC	PD6237C
IC	1903	IC	SED1540F0A
IC	1904	IC	SED1526F0A
IC	1905	IC	SED1526F0A
D	1901	Diode	MA153
D	1902	Diode	MA153
D	1903	Diode	MA153
D	1904	Diode	MA152WA
D	1905	LED	CL170SBX
D	1907	LED	CL170PGCD
D	1909	LED	CL170PGCD
D	1910	LED	CL170SBX
D	1912	LED	CL170PGCD
D	1913	LED	CL170PGCD
D	1914	LED	CL170PGCD
D	1915	LED	CL170SBX
D	1917	LED	CL170PGCD
D	1918	LED	CL170PGCD
D	1919	LED	CL170SBX
D	1920	LED	CL170PGCD
L	1901	Inductor	LCTA2R2J3225
L	1902	Inductor	LCTB2R2K2125
L	1903	Inductor	LCTB2R2K2125
L	1904	Inductor	LCTB2R2K2125
L	1905	Inductor	LCTA4R7J3225
X	1901	Radiator 3.77MHz	CSS1427
S	1901	Spring Switch	CSN1042
S	1902	Push Switch	CSG1117
S	1903	Switch	CSG1075
S	1904	Push Switch	CSG1117
S	1906	Push Switch	CSG1118
S	1907	Switch	CSG1075
S	1908	Push Switch	CSG1117
S	1909	Push Switch	CSG1117
S	1910	Push Switch	CSG1117
S	1911	Switch	CSG1108
S	1913	Push Switch	CSG1117
S	1914	Push Switch	CSG1118
S	1915	Switch	CSG1107
S	1916	Push Switch	CSG1117
VR	1901	Semi-fixed 220kΩ(B)	CCP1237
VR	1902	Semi-fixed 220kΩ(B)	CCP1237
EL	1901	EL	CEL1580
LCD	1901	LCD (DEX-P1R/UC)	CAW1470
LCD	1901	LCD (DEH-P946/ES,DEX-P1/ES)	CAW1471

RESISTORS

R	1901		RS1/8S222J
R	1902		RS1/8S222J
R	1903		RS1/8S222J
R	1904		RS1/10S121J
R	1905		RS1/10S473J
R	1906		RS1/8S102J
R	1907		RS1/8S751J
R	1908		RS1/10S103J
R	1909		RS1/10S0R0J
R	1910		RS1/8S751J
R	1911		RS1/8S751J
R	1912		RS1/8S102J
R	1913		RS1/10S103J
R	1914		RS1/10S0R0J
R	1916		RS1/8S751J
R	1917		RS1/4S471J
R	1918		RS1/10S103J
R	1919		RS1/10S0R0J
R	1921		RS1/4S471J
R	1922		RS1/10S103J
R	1923		RS1/10S0R0J
R	1924		RS1/10S0R0J
R	1927		RS1/10S473J
R	1928		RS1/10S473J
R	1929		RS1/10S473J
R	1930		RS1/10S473J
R	1931		RS1/16S470J
R	1932		RS1/16S470J
R	1935		RS1/10S473J
R	1936		RS1/10S473J
R	1937		RS1/10S103J
R	1938		RS1/10S473J
R	1939		RA4C101J
R	1940		RS1/10S103J
R	1941		RA4C101J
R	1942		RS1/10S103J
R	1943		RS1/10S473J
R	1944		RS1/10S473J
R	1945		RS1/10S473J
R	1946		RA3C102J
R	1947		RA3C102J
R	1948		RA3C102J
R	1950		RS1/10S624J
R	1951		RS1/10S754J
R	1952		RS1/10S624J
R	1953		RS1/10S754J
R	1954		RS1/10S471J
R	1955		RS1/10S471J
R	1956		RS1/10S471J
R	1957		RS1/10S471J
R	1958		RS1/10S473J
R	1959		RS1/10S472J
R	1960		RS1/10S103J
R	1961		RS1/10S103J
R	1962		RS1/10S103J
R	1963		RS1/10S0R0J
R	1964		RS1/8S102J
R	1965		RS1/8S751J
R	1966		RS1/8S751J
R	1967		RS1/8S751J
R	1968		RS1/8S102J
R	1970		RS1/8S751J

CAPACITORS

C	1901		CSZSR100M6R3
C	1902		CKSQYB104K16
C	1903		CKSQYB104K16
C	1904		CKSQYB104K16
C	1905		CKSQYB104K16
C	1906		CKSQYB103K50
C	1907		CKSQYB103K50
C	1908		CKSQYB103K50
C	1909		CKSQYF105Z16
C	1910		CKSQYF105Z16
C	1911		CKSQYF105Z16
C	1912		CKSQYF105Z16
C	1913		CKSQYF105Z16
C	1914		CKSQYF105Z16
C	1915		CKSQYF105Z16

=====Circuit Symbol and No.	===Part Name	Part No.
C 1916		CKSQYF105Z16
C 1917		CKSQYB103K50
C 1918		CSZS1R0M16
C 1919		CSZS1R0M16
C 1920		CSZS1R0M16
C 1921		CKSQYF105Z16
C 1922		CKSQYF105Z16
C 1923		CKSQYF105Z16
C 1924		CKSQYF105Z16
C 1925		CKSQYF105Z16
C 1926		CKSQYB103K50
C 1927		CSZS1R0M16
C 1928		CSZS1R0M16
C 1929		CSZS1R0M16
C 1934		CSZSR100M6R3
C 1935		CKSQYB104K16
C 1936		CSZSR100M6R3

F Unit Number : CWX2213
Unit Name : DSP Unit

MISCELLANEOUS

IC	3001	IC	PD5445C
IC	3101	IC	AK7712AVT
IC	3102	IC	TC9331F
IC	3103	IC(M5M51016BTP-70LL)	GGC1325
IC	3141	IC	BU4066BCFV
IC	3142	IC	TC7S08FU
IC	3201	IC	PE2001AF
IC	3301	IC	PM0017AM
L	3001	High Loss Inductor	CTF1410
L	3002	High Loss Inductor	CTF1410
L	3003	High Loss Inductor	CTF1410
L	3004	High Loss Inductor	CTF1410
L	3101	High Loss Inductor	CTF1410
L	3102	High Loss Inductor	CTF1410
L	3103	High Loss Inductor	CTF1410
L	3104	High Loss Inductor	CTF1410
L	3141	Inductor	LCTB2R2K2125
L	3142	High Loss Inductor	CTF1410
L	3143	Inductor	CTF1420
L	3151	High Loss Inductor	CTF1410
L	3152	High Loss Inductor	CTF1410
L	3153	High Loss Inductor	CTF1410
L	3154	High Loss Inductor	CTF1410
L	3201	High Loss Inductor	CTF1410
L	3301	High Loss Inductor	CTF1410
L	3302	High Loss Inductor	CTF1410
L	3303	High Loss Inductor	CTF1410
L	3304	High Loss Inductor	CTF1410
L	3305	High Loss Inductor	CTF1410
L	3306	High Loss Inductor	CTF1410
X	3001	Resonator 10.00MHz	CSS1428
X	3101	Crystal Resonator 16.9344MHz	CSS1067
X	3102	Crystal Resonator 32.0MHz	CSS1360

RESISTORS

R	3001	RS1/16S102J
R	3002	RS1/16S102J
R	3003	RS1/16S102J
R	3004	RS1/16S681J
R	3005	RS1/16S681J
R	3006	RS1/16S681J
R	3007	RS1/16S681J
R	3008	RS1/16S681J
R	3009	RS1/16S102J
R	3010	RS1/16S102J
R	3011	RS1/16S102J
R	3012	RS1/16S102J
R	3013	RS1/16S102J
R	3014	RS1/16S102J
R	3015	RS1/16S473J
R	3016	RA3C102J
R	3018	RS1/16S102J
R	3019	RS1/16S102J
R	3020	RS1/16S102J
R	3021	RS1/16S102J
R	3022	RS1/16S102J
R	3023	RS1/16S102J
R	3024	RS1/16S102J
R	3025	RS1/16S102J
R	3026	RS1/16S102J
R	3027	RS1/16S102J
R	3028	RS1/16S102J
R	3029	RS1/16S102J
R	3030	RS1/16S102J
R	3031	RS1/16S102J
R	3032	RS1/16S102J
R	3033	RS1/16S473J
R	3034	RS1/16S473J
R	3035	RS1/16S473J
R	3036	RS1/16S105J
R	3037	RS1/16S102J
R	3101	RS1/16S473J
R	3102	RS1/16S473J
R	3103	RA4C102J
R	3104	RA4C102J
R	3105	RA4C102J
R	3106	RA4C102J
R	3108	RA4C102J
R	3109	RA4C102J
R	3110	RA4C102J
R	3111	RA4C102J
R	3112	RS1/16S105J
R	3113	RS1/16S105J
R	3114	RS1/16S102J
R	3115	RS1/16S102J
R	3116	RS1/16S473J
R	3141	RA3C103J
R	3151	RSK1/16S151J
R	3152	RSK1/16S151J
R	3153	RSK1/16S151J
R	3154	RSK1/16S151J
R	3155	RSK1/16S151J
R	3156	RSK1/16S151J
R	3160	RS1/10S0R0J

CAPACITORS

C	3002	CKSYB106K6R3
C	3102	CKSQYB103K50
C	3104	CCSRCH100D50
C	3105	CCSRCH100D50
C	3107	CKSYB106K6R3
C	3108	CKSQYB104K16
C	3109	CSZSR470M6R3
C	3110	CKSQYB104K16
C	3111	CKSYB106K6R3
C	3112	CKSQYB104K16
C	3113	CCSQCH221J50
C	3114	CKSYB106K6R3
C	3115	CCSQCH100J50
C	3116	CCSQCH100J50
C	3117	CKSYB106K6R3

=====Circuit Symbol and No.	Part Name	Part No.
C 3119		CKSYB106K6R3
C 3120		CKSQYB104K16
C 3141		CKSQYB103K50
C 3143		CKSQYB103K50
C 3145		CCSQCH470J50
C 3146		CCSRCH221J50
C 3151		CKLSRB332K50
C 3152		CKLSRB332K50
C 3159		CKLSRR103K16
C 3160		CKLSRR103K16
C 3161		CKLSRR103K16
C 3162		CKLSRR103K16
C 3163		CKLSRR103K16
C 3164		CKLSRR103K16
C 3201		CKSYB106K6R3
C 3203		CKSQYB104K16
C 3205		CSZSR470M6R3
C 3206		CKSQYB104K16
C 3207		CKSYB106K6R3
C 3301		CKSYB475K10
C 3302		CKSYB475K10
C 3303		CKSYB475K10
C 3304		CKSYB475K10
C 3305		CKSYB475K10
C 3306		CKSYB475K10
C 3307		CKSQYB104K16
C 3308		CKSYB106K6R3
C 3309		CKSQYB104K16

G Unit Number : CWM4538(DEX-P1R/UC,DEX-P1/ES)
Unit Name : D/D Converter Unit

MISCELLANEOUS

IC	4001	IC	TL1451ANS
Q	4001	Transistor	2SA1797
Q	4002	Transistor	2SC2812
Q	4003	Transistor	2SA1179
Q	4004	Transistor	2SA1576
Q	4005	Transistor	DTC124EU
D	4001	Diode	SC802-06
L	4001	Choke Coil 220µH	CTH1164
L	4002	Choke Coil 220µH	CTH1164
L	4003	Choke Coil 220µH	CTH1164

RESISTORS

R	4001		RS1/10S122J
R	4002		RS1/10S473J
R	4003		RS1/4S681J
R	4004		RS1/10S101J
R	4005	(RN1/10SE3302D)	GGC1319
R	4006	(RN1/10SE1202D)	GGC1269
R	4007		RS1/10S104J
R	4008	(RN1/10SE6201D)	GGC1324
R	4009		RS1/10S223J
R	4010		RS1/10S223J
R	4011		RS1/10S101J
R	4012	(RN1/10SE1002D)	GGC1320
R	4013	(RN1/10SE1002D)	GGC1320
R	4016		RS1/10S754J
R	4017	(RN1/10SE9101D)	GGC1321
R	4018	(RN1/10SE1502D)	GGC1322
R	4019	(RN1/10SE3002D)	GGC1323

CAPACITORS

C	4001	33µF/25V	CCH1249
C	4002		CKSQYB102K50
C	4003	33µF/25V	CCH1249
C	4004		CCSQCH101J50
C	4005		CKSQYB102K50

=====Circuit Symbol and No.	Part Name	Part No.
C 4006	33µF/25V	CCH1249
C 4008	33µF/25V	CCH1249
C 4009		CKSQYB102K50
C 4010		CKSQYB102K50
C 4011		CKSQYF105Z16
C 4012		CCSQCH221J50
C 4013		CKSQYB104K25
C 4014		CKSQYB102K50

High Out Unit
Consists of
D/D Converter PCB
High Out PCB

E **H** Unit Number : CWX2215(DEX-P1R/UC,DEX-P1/ES)
Unit Name : High Out Unit

MISCELLANEOUS

IC	4151	IC	NJM4580M
IC	4251	IC	NJM4580M
IC	4351	IC	NJM4580M
Q	4151	Transistor	IMX9
Q	4251	Transistor	IMX9
Q	4351	Transistor	IMX9

RESISTORS

R	4153	RSK1/10S103J
R	4154	RSK1/10S103J
R	4155	RSK1/10S153J
R	4156	RSK1/10S153J
R	4157	RSK1/10S680J
R	4158	RSK1/10S680J
R	4159	RS1/10S223J
R	4160	RS1/10S223J
R	4161	RS1/10S222J
R	4162	RS1/10S222J
R	4163	RS1/10S103J
R	4253	RSK1/10S103J
R	4254	RSK1/10S103J
R	4255	RSK1/10S163J
R	4256	RSK1/10S163J
R	4257	RSK1/10S680J
R	4258	RSK1/10S680J
R	4259	RS1/10S223J
R	4260	RS1/10S223J
R	4261	RS1/10S222J
R	4262	RS1/10S222J
R	4353	RSK1/10S103J
R	4354	RSK1/10S103J
R	4355	RSK1/10S153J
R	4356	RSK1/10S153J
R	4357	RSK1/10S680J
R	4358	RSK1/10S680J
R	4359	RS1/10S223J
R	4360	RS1/10S223J
R	4361	RS1/10S222J
R	4362	RS1/10S222J

CAPACITORS

C	4151	CEWAR100M50
C	4152	CKSQYB471K50
C	4153	CEWAR100M50
C	4154	CEWAR100M50
C	4157	CCSQCH820J50
C	4158	CCSQCH820J50
C	4253	CEWAR100M50
C	4254	CEWAR100M50
C	4257	CCSQCH820J50
C	4258	CCSQCH820J50

=====Circuit Symbol and No.	Part Name	Part No.
C 4353		CEWAR100M50
C 4354		CEWAR100M50
C 4357		CCSQCH820J50
C 4358		CCSQCH820J50

L Unit Number : CWX2216
Unit Name : ASL Unit

MISCELLANEOUS

IC	4501	IC	NJM2068MD
IC	4502	IC	NJM2068MD
Q	4501	Transistor	2SC2458
D	4501	Diode	MA152WK
D	4502	Diode	MA3043(LMH)
D	4503	Diode	MA3075(M)
VR	4501	Semi-fixed 10KΩ(B)	CCP1319
MIC	4501	Microphone	CPM1011

RESISTORS

R 4501		RS1/8S222J
R 4502		RS1/8S683J
R 4503		RS1/8S103J
R 4504		RS1/8S472J
R 4505		RS1/8S471J
R 4506		RS1/8S682J
R 4507		RS1/8S684J
R 4508		RS1/8S562J
R 4509		RS1/8S391J
R 4510		RS1/8S472J
R 4511		RS1/8S472J
R 4512		RS1/8S472J
R 4513		RS1/8S153J
R 4514		RS1/8S153J
R 4515		RS1/8S102J
R 4517		RS1/8S270J

CAPACITORS

C 4501	CEJA470M10
C 4502	CEJA470M10
C 4503	CEJAR68M50
C 4504	CEJA100M16
C 4505	CEJA470M10
C 4506	CEJA470M16
C 4507	CEJA100M16
C 4508	CEJANP220M10
C 4509	CEJAR68M50
C 4510	CEJANP100M10
C 4511	CKSYB823K50
C 4512	CCSCH101J50
C 4513	CEJA470M10

I Unit Number : CWX2191
Unit Name : Mechanism FPC Unit

MISCELLANEOUS

D	1	LED	CL200IRX
D	2	LED	CL200IRX
D	3	LED	CL200IRX
S	1	Spring Switch(Clamp)	CSN1033
S	2	Spring Switch(Home)	CSN1033

RESISTORS

R 1	RS1/8S0R0J
R 2	RS1/8S0R0J
R 3	RS1/8S751J
R 4	RS1/8S751J
R 5	RS1/8S751J

=====Circuit Symbol and No.	Part Name	Part No.

J Unit Number : CWX2190
Unit Name : Photo FPC Unit

P	1	Photo-transistor	CPT-230S-X
P	2	Photo-transistor	CPT-230S-X
P	3	Photo-transistor	CPT-230S-X

K Unit Number :
Unit Name : Flap Sense PCB

S	951	Switch(CLOSE)	CSN1012
S	952	Switch(OPEN)	CSN1022

M Unit Number :
Unit Name : Microphone Jack Unit

D	4601	LED	BR4361F

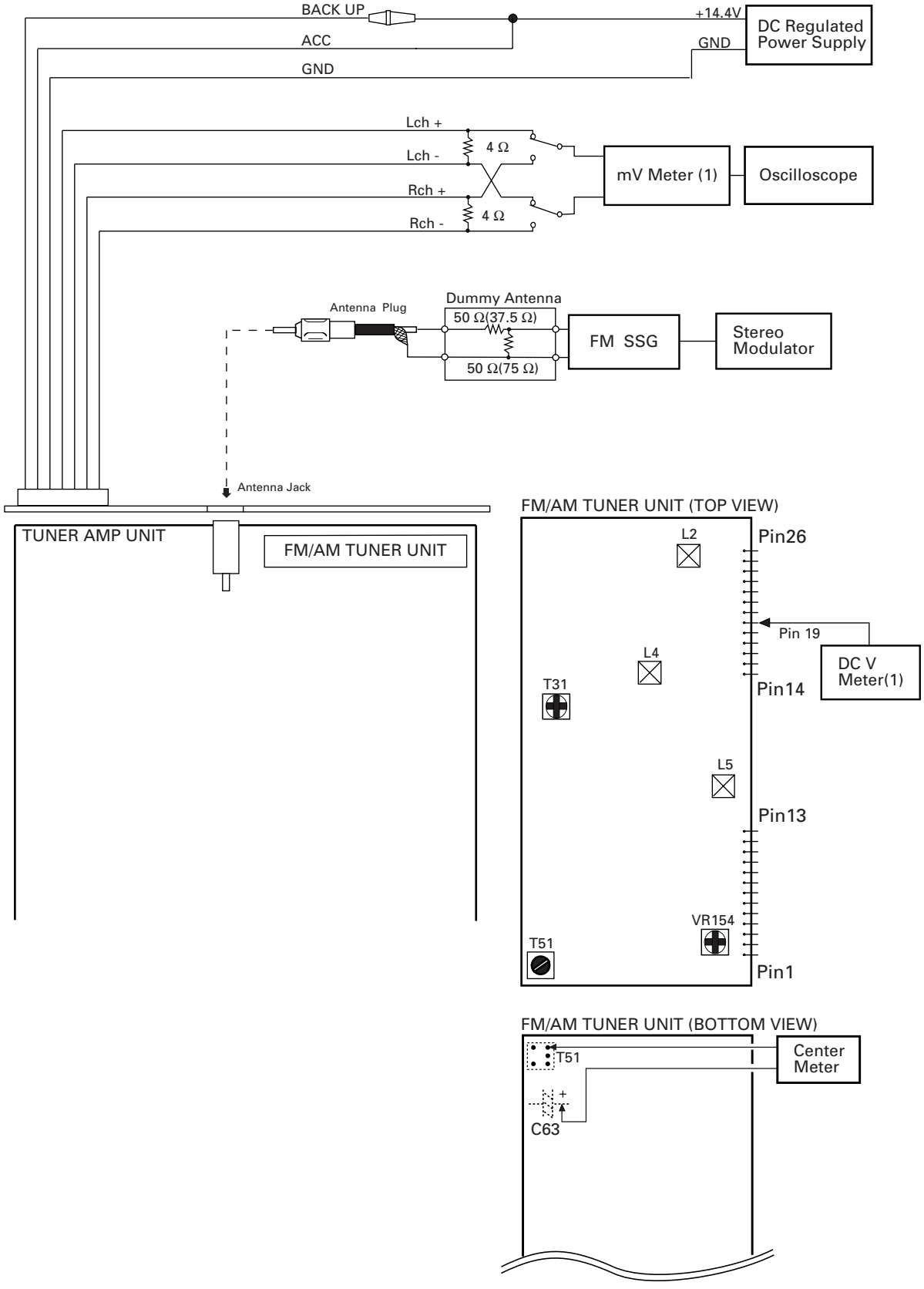
Miscellaneous Parts List

		Pickup Unit(Service)	CXX1290
M	1	CRG Motor Assy(Carriage)	CXB1670
M	2	LOAD Motor Unit(Loading)	CXB1684
M	3	Motor(Spindle)	CXM1129
M	851	Motor	CXM1085

6. ADJUSTMENT

6.1 TUNER ADJUSTMENT

● Connection Diagram



FM ADJUSTMENT

Modulation M:MONO MOD., 400Hz 30%(22.5kHz Dev.)
S:STEREO MOD., 1kHz, L or R=30%(20.25kHz+7.5kHz Dev.)

NOTE:Before proceeding to further adjustments after switching power ON, let the tuner run for ten minutes to allow the circuits to stabilize.

	No.	FM SSG		Displayed	Adjustment	Adjustment Method
		Frequency(MHz)	Level(dBf)	Frequency(MHz)	Point	(Switch Position)
TUN Volt	1	•••••	•••••	108.0	L5	DC V Meter(1) : 6V
IF	1	98.1 M	60	98.1	T51	Center Meter : 0
ANT Coil	1	98.1 M	5	98.1	L2	mV Meter(1) : Maximum
RF Coil	1	98.1 M	5	98.1	L4	mV Meter(1) : Maximum
IFT	1	98.1 M	5	98.1	T31	mV Meter(1) : Maximum (STEREO MODE)
ARC	1	98.1 S	39	98.1	VR154	mV Meter(1) : Separation 5dB (STEREO MODE)

6.2 KEYBDOARD UNIT ADJUSTMENT

● ADJUSTMENT OF VISUAL-FIELD ANGLE OF THE KEYBOARD UNIT

No.	Standard	Measurement Point	Adjustment Point	Conditions
1	Adjustment standard -0.10[V]	-2.5+0.10[V] or TP14	IC1904-6pin	VR1902 SW VDD supply voltage 5[V]
	Inspection +0.15[V] standard -0.15[V]	IC1905-6pin - or TP15	VR1901	

6.3 CD ADJUSTMENT

1)Precautions

• This unit uses a single power supply (+5V) for the regulator. The signal reference potential, therefore, is connected to REFO(approx. 2.5V) instead of GND.
If REFO and GND are connected to each other by mistake during adjustments, not only will it be impossible to measure the potential correctly, but the servo will malfunction and a severe shock will be applied to the pick-up. To avoid this, take special note of the following.
Do not connect the negative probe of the measuring equipment to REFO and GND together. It is especially important not to connect the channel 1 negative probe of the oscilloscope to REFO with the channel 2 negative probe connected to GND.
Since the frame of the measuring instrument is usually at the same potential as the negative probe, change the frame of the measuring instrument to floating status.
If by accident REFO comes in contact with GND, immediately switch the regulator or power OFF.

• Always make sure the regulator is OFF when connecting and disconnecting the various filters and wiring required for measurements.

• Before proceeding to further adjustments and measurements after switching regulator ON, let the player run for about one minute to allow the circuits to stabilize.

• Since the protective systems in the unit's software are rendered inoperative in test mode, be very careful to avoid mechanical and /or electrical shocks to the system when making adjustment.

• Test mode starting procedure
Switch ACC, back-up ON while pressing the **CLOCK** and **TR–** keys together.

• Test mode cancellation
Switch ACC, back-up OFF.

• Disc detection during loading and eject operations is performed by means of a photo transistor in this unit.Consequently, if the inside of the unit is exposed to a strong light source when the outer casing is removed for repairs or adjustment, the following malfunctions may occur.
*During PLAY, even if the eject button is pressed,the disc will not be ejected and the unit will remain in the PLAY mode.
*The unit will not load a disc.
When the unit malfunctions this way, either re-position the light source, move the unit or cover the photo transistor.

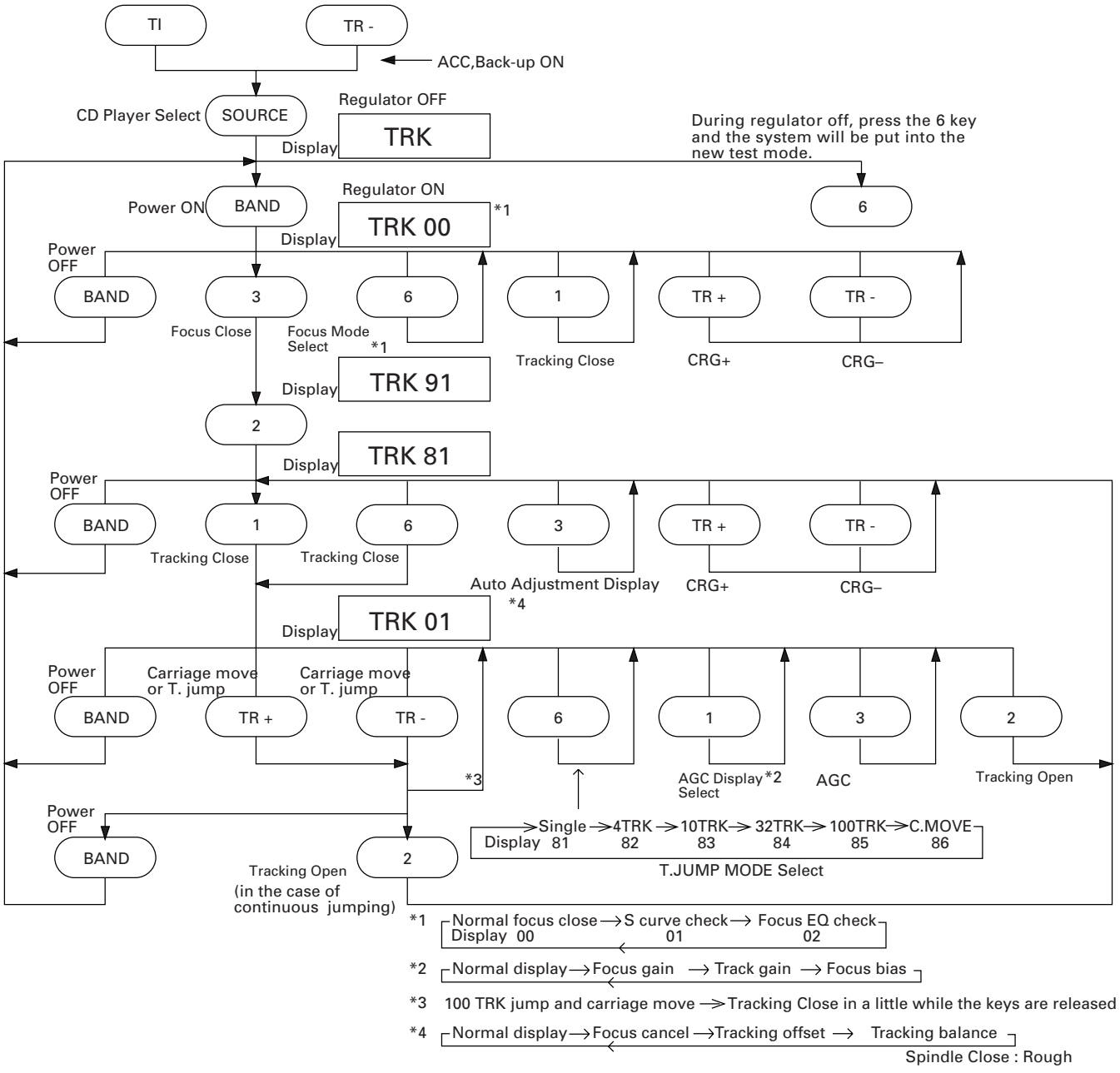
• When loading and unloading discs during adjustment procedures, always wait for the disc to be properly clamped or ejected before pressing another key. Otherwise, there is a risk of the actuator being destroyed.

• Turn power off when pressing the button TR+ or the button TR- key for focus search in the test mode. (Or else lens may stick and the actuator may be damaged.)

• SINGLE/4TRK/10TRK/32TRK will continue to operate even after the key is released.Tracking is closed the moment C-MOVE is released.

• JUMP MODE resets to SINGLE as soon as power is switched OFF.

● Flow Chart


TI
TR -
ACC,Back-up ON
CD Player Select
SOURCE
Regulator OFF
Display
TRK
During regulator off, press the 6 key and the system will be put into the new test mode.
Power ON
BAND
Regulator ON
*1
TRK 00
6
Power OFF
BAND
3
6
1
TR +
TR -
Focus Close
Focus Mode Select
*1
Tracking Close
CRG+
CRG–
TRK 91
2
TRK 81
Power OFF
BAND
1
6
3
TR +
TR -
Tracking Close
Tracking Close
Auto Adjustment Display
*4
CRG+
CRG–
TRK 01
Power OFF
Carriage move or T. jump
Carriage move or T. jump
BAND
TR +
TR -
6
1
3
2
*3
AGC Display Select
*2
AGC
Tracking Open
Power OFF
BAND
2
Tracking Open
(in the case of continuous jumping)
Single
4TRK
10TRK
32TRK
100TRK
C.MOVE
Display 81
82
83
84
85
86
T.JUMP MODE Select
*1 Normal focus close → S curve check → Focus EQ check
Display 00 01 02
*2 Normal display → Focus gain → Track gain → Focus bias
*3 100 TRK jump and carriage move → Tracking Close in a little while the keys are released
*4 Normal display → Focus cancel → Tracking offset → Tracking balance
Spindle Close : Rough

6.4 CHECKING THE GRATING AFTER CHANGING THE PICKUP UNIT

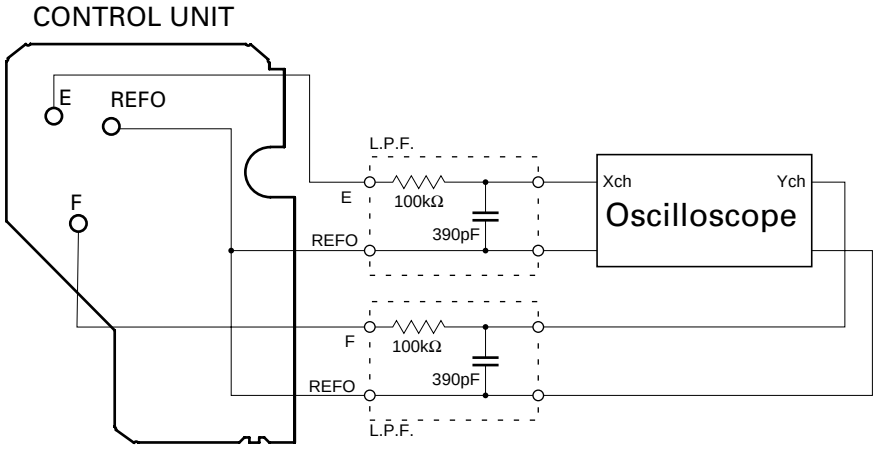
• **Note :**
Unlike previous CD mechanism modules the grating angle of the PU unit cannot be adjusted after the PU unit is changed. The PU unit in the CD mechanism module is adjusted on the production line to match the CD mechanism module and is thus the best adjusted PU unit for the CD mechanism module. Changing the PU unit is thus best considered as a last resort. However, if the PU unit must be changed, the grating should be checked using the procedure below.

• **Purpose :**
To check that the grating is within an acceptable range.

• **Symptoms of Mal-adjustment :**
If the grating is off by a large amount symptoms such as being unable to close tracking, being unable to perform track search operations, or track searching taking a long time, may appear.

• **Method :**

• Measuring Equipment	• Oscilloscope, Two L.P.F.
• Measuring Points	• E, F, REFOUT
• Disc	• ABEX TCD-784
• Mode	• TEST MODE



• **Checking Procedure**

1. In test mode, load the disc and switch the 5V regulator on.
2. Using the **TR+** and **TR-** buttons, move the PU unit to the innermost track.
3. Press key **3** to close focus, the display should read "91". Press key **2** to implement the tracking balance adjustment the display should now read "81". Press key **3** 4 times. The display will change, returning to "81" on the fourth press.
4. As shown in the diagram above, monitor the LPF outputs using the oscilloscope and check that the phase difference is within 75° . Refer to the photographs supplied to determine the phase angle.
5. If the phase difference is determined to be greater than 75° try changing the PU unit to see if there is any improvement. If, after trying this a number of times, the grating angle does not become less than 75° then the mechanism should be judged to be at fault.

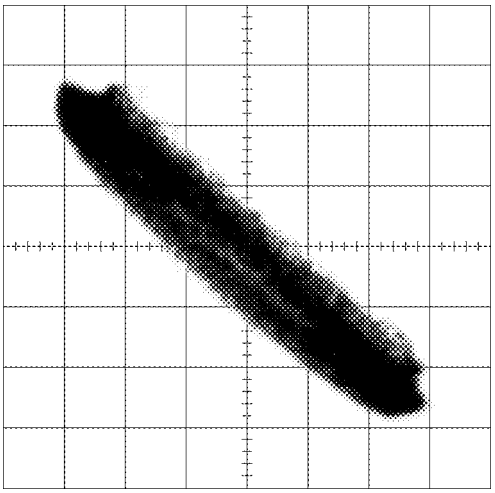
• **Note**
Because of eccentricity in the disc and a slight misalignment of the clamping center the grating waveform may be seen to "wobble" (the phase difference changes as the disc rotates). The angle specified above indicates the average angle.

• **Hint**
Reloading the disc changes the clamp position and may decrease the "wobble".

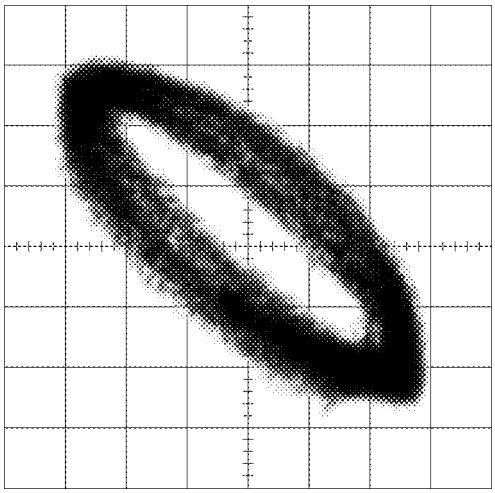
Grating waveform

Ech → Xch 20mV/div, AC
Fch → Ych 20mV/div, AC

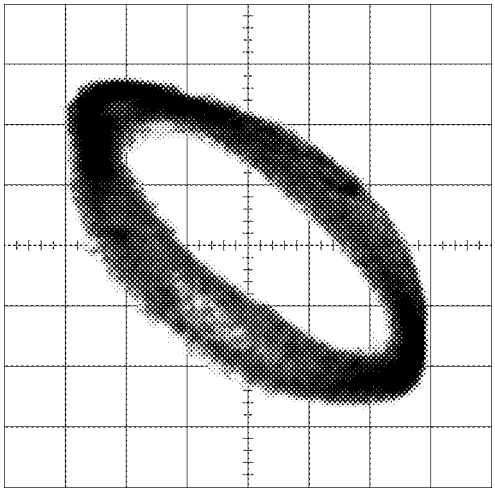
0°



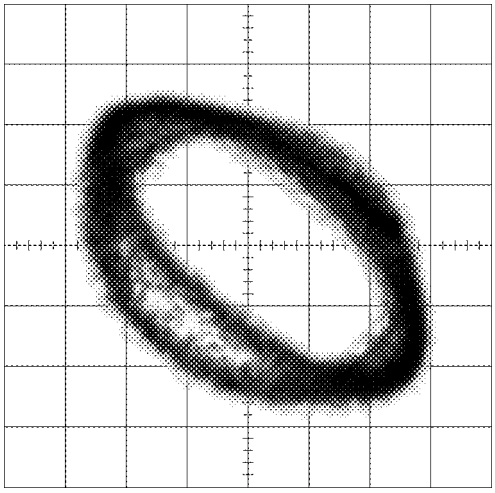
30°



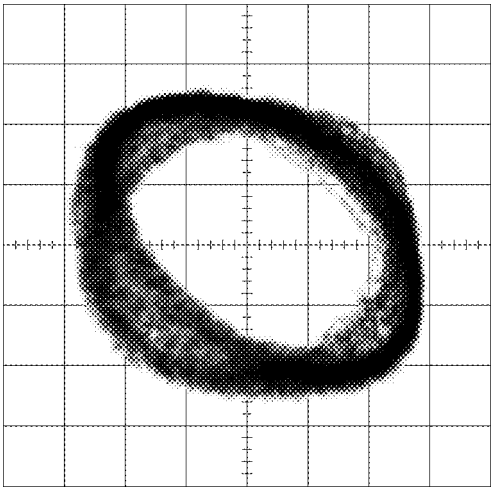
45°



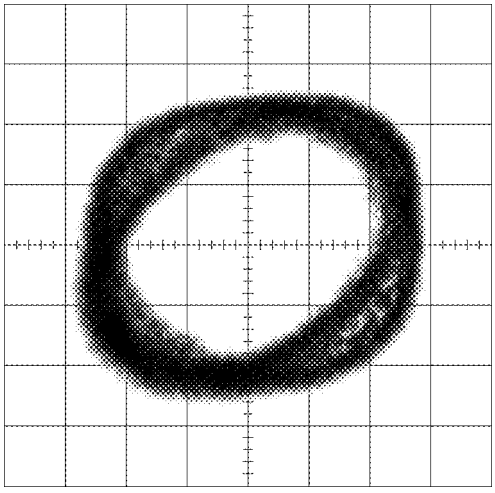
60°



75°



90°



7. GENERAL INFORMATION

7.1 PARTS

7.1.1 IC

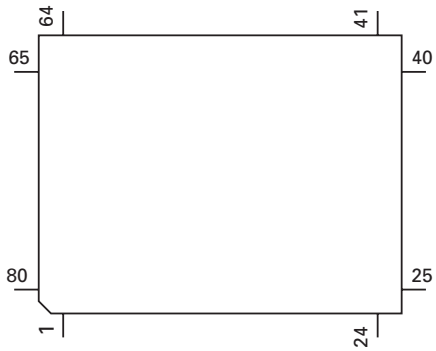
UPD63702AGF	PD4908A	AK7712AVT
BA6797FM	PD4906A	GGC1325(M5M51016BTP-70LL)
LC89170M	PD4931A	TC7S08FU
BA05SFP	PD0236AM	PE2001AF
LB1930M	PD6237B	PM0017AM
PM2006A	SED1540F0A	NJM4580M
PD6191A	SED1526F0A	
PD8034A	PD5445A	

● **Pin Functions (UPD63702AGF)**

Pin No.	Pin Name	I/O	Function and Operation
1	D.VDD		Supplies current of positive voltage to the logic circuits
2	$\overline{RST}$	I	System reset input pin
3	AO	I	Microcomputer interface AO="L": $\overline{STB}$ active and set to address register AO="H": $\overline{STB}$ active and set to parameter
4	$\overline{STB}$	I	Signal to latch serial data within the LSI
5	$\overline{SCK}$	I	Clock input pin to input and output serial data
6	SO	O	Outputs serial data and status signal
7	SI	I	Serial data input pin
8	D.GND		Logic circuit GND
9	X.GND		Crystal oscillation circuit GND
10	XTAL	I	Crystal oscillator connection pin
11	$\overline{XTAL}$	O	Crystal oscillator connection pin
12	X.VDD		Supplies current of positive voltage to the crystal oscillation circuit
13	DA.VDD		Supplies current of positive voltage to the D/A converter
14	R+	O	Right channel analog audio data output pin
15	R-	O	Right channel analog audio data output pin
16,17	DA.GND		D/A converter GND
18	L-	O	Left channel analog audio data output pin
19	L+	O	Left channel analog audio data output pin
20	DA.VDD		Supplies current of positive voltage to the D/A converter
21	D.VDD		Supplies current of positive voltage to logic circuit
22	FLAG	O	Flag output pin to indicate that audio data currently being output consists of noncorrectable data
23	WDCK	O	Pin to output double the frequency of LRCK
24	C16M	O	Pin to output the clock
25	EMPH	O	Output pin for the pre-emphasis data in the sub-Q code
26	DIN	I	Input pin for serial audio data
27	DOUT	O	Output pin for the serial audio data
28	SCKO	O	Output pin for the clock for the serial audio data
29	LRCK	O	Signals to distinguish the right and left channels of the audio data output from DOUT. Frequency is 44.1kHz at 50% duty at normal regeneration
30	TX	O	Output pin for the digital audio interface data
31	CTLV	I	Oscillation control pin for high-frequency clock generation VCO used for the digital PLL upon regeneration at fast speed of 2- or 4-fold
32	POUT	O	Output point for phase comparison
33	D.GND		GND for the logic circuit
34	VCO	I	Input pin for the inverter
35	$\overline{VCO}$	O	Output pin for the inverter
36	D.VDD		Supplies current of positive voltage to the logic circuit
37	PLCK	O	Pin for monitoring the bit clock

Pin No.	Pin Name	I/O	Function and Operation
38	LOCK	O	Indicates "H" when the synchronized pattern detection signal matches the frame counter output at the EFM recovery modulation, and "L" when they don't match
39	WFCK	O	Minute-cycle signal for the bit clock, the signal indicates the cycle of 1 frame (approx. 7.35kHz)
40	RFCK	O	Minute-cycle signal for the clock, the signal indicates cycle of 1 frame (approx. 7.35kHz)
41	D.GND		GND for the logic circuit
42,43	TEST0,1	I	Test pins
44,45	TM2, TM4	I	Pins for controlling regeneration at fast speed of 2- or 4-fold
46-49	T4-T7	I	Test pins
50,51	C1D1, C1D2	O	Output pin for indicating the C1 error correction results
52-54	C2D1-C2D3	O	Output pin for indicating the C2 error correction results
55	D.VDD		Supplies current of positive voltage to the logic circuit
56	SFSY	O	Outputs 1 word of the subcode. Generally, 1 cycle is approx 136 micro seconds
57	SBSY	O	The signal indicates the beginning of the subcode block. The SFSY signal is output at high level every 98 times
58	SBSO	O	Output pin for the subcode data
59	SBCK	I	Input pin for the clock signal for read-out of the subcode data
60	A.GND		GND for the analog circuit
61	MD	O	Output pin for the spindle drive
62	SD	O	Output pin for the sled drive
63	TD	O	Output pin for the tracking drive
64	FD	O	Output pin for the focus drive
65	FBAL	O	Output pin for the focus balance control
66	TBAL	O	Output pin for the tracking balance control
67	A.VDD		Supplies current of positive voltage to the analog circuit
68	TBC	I	Switches coefficient banks for the tracking filter
69	EFM	I	Input pin for the EFM signal
70	HOLD	I	Input pin for the hold control signal
71	RFOK	I	Input pin for the RFOK signal
72	MIRR	I	Input pin for the MIRR signal
73	A.GND		GND for the analog circuit
74	HOME	I	Home position detector input
75	VR1	I	The signal input through these pins is digitized to 8-bit by the A/D converter, which by operation of the assigned register, can be read into the microcomputer
76	FE	I	Inputs a focus-error signal from the RF amplifier
77	TE	I	Inputs a tracking-error signal from the RF amplifier
78	TEC	I	Input pin for the tracking comparator
79	REFOUT	O	Output point for midpoint potential for the A/D converter for the LSI portion
80	A.VDD		Supplies current of accurate voltage to the analog circuit

*UPD63702AGF

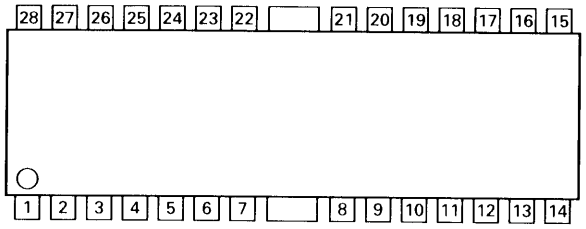


IC's marked by* are MOS type.
Be careful in handling them because they are very liable to be damaged by electrostatic induction.

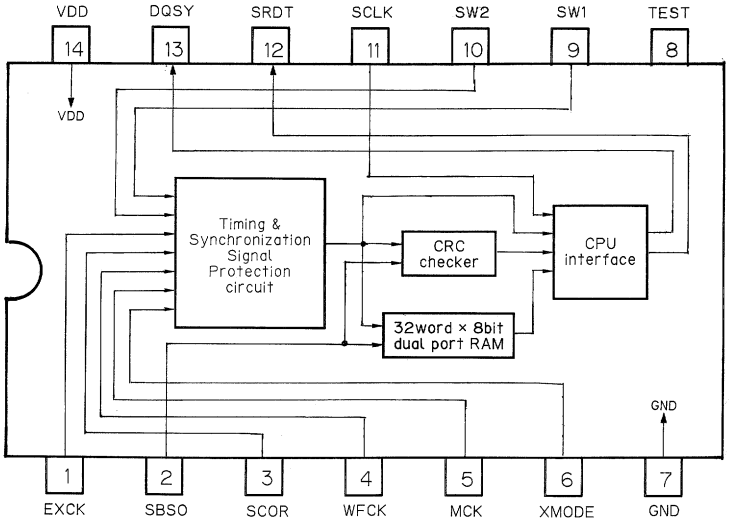
● Pin Functions (BA6797FM)

Pin No.	Pin Name	I/O	Function and Operation
1	OUT1-A	O	Driver CH1 output
2	OUT1-B	O	Driver CH1 output
3	PRE-OUT1	O	CH1 pre-amplifier output
4	IN1(-)	I	CH1 pre-amplifier inverted input
5	IN1(+)	I	CH1 pre-amplifier input
6	REG-B	O	External Tr base connection
7	REG-OUT	O	Fixed voltage output (External Tr collect connection)
8	BIAS-IN	I	Bias input
9	MUTE	I	Mute control
10	IN2(+)	I	CH2 pre-amplifier input
11	IN2(-)	I	CH2 pre-amplifier inverted input
12	PRE-OUT2	O	CH2 pre-amplifier output
13	OUT2-B	O	Driver H2 output
14	OUT2-A	O	Driver CH2 output
15	GND		Sub straight GND
16	OUT3-A	O	Driver CH3 output
17	OUT3-B	O	Driver CH3 output
18	PRE-OUT3	O	CH3 pre-amplifier output
19	IN3(-)	O	CH3 pre-amplifier inverted output
20	IN3(+)	O	CH3 pre-amplifier output
21	VCC		VCC
22	VCC		VCC
23	IN4(+)	O	CH4 pre-amplifier output
24	IN4(-)	O	CH4 pre-amplifier inverted output
25	PRE-OUT4	O	CH4 pre-amplifier output
26	OUT4-B	O	Driver CH4 output
27	OUT4-A	O	Driver CH4 output
28	GND		Sub straight GND

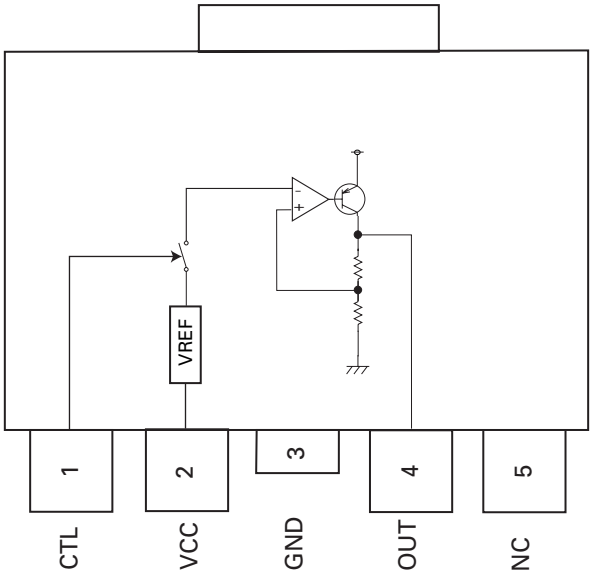
BA6797FM



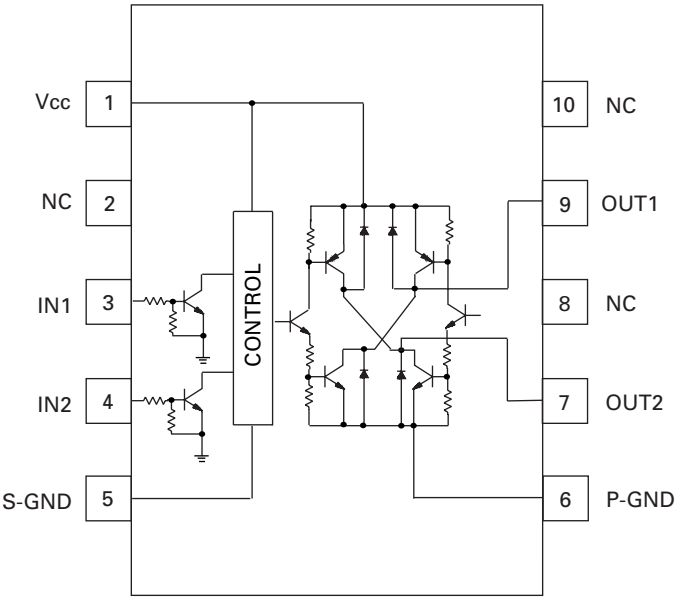
LC89170M



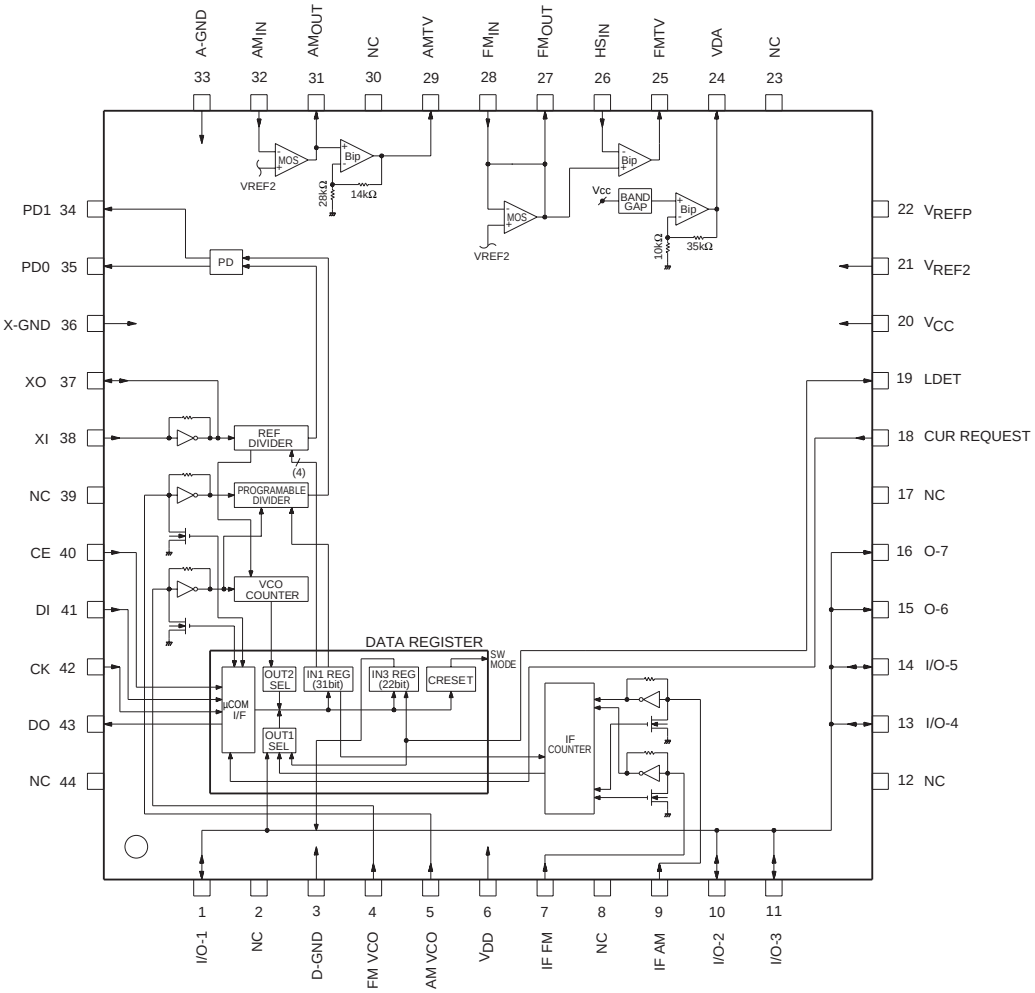
BA05SFP



LB1930M



PM2006A

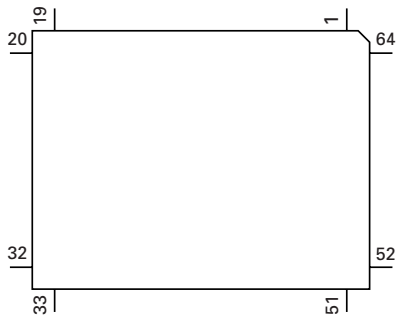


● Pin Functions (PD6191A)

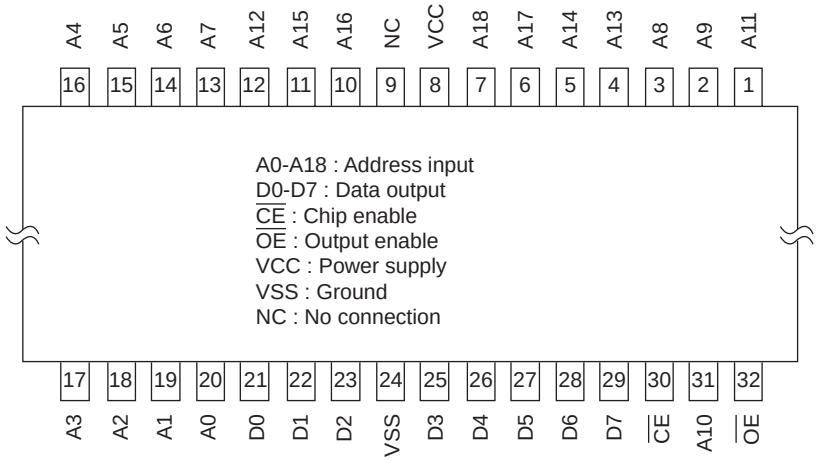
Pin No.	Pin Name	I/O	Format	Function and Operation
1-8	OPEN			Open
9	$\overline{OE}$	O		ROM output control
10	$\overline{ROMEN}$	O		ROM enable
11	ADD17	O		ROM address
12	AVCC			Analog power supply
13	AVR			5V power supply
14	AVSS			Connect to GND
15	$\overline{IRSEL}$	I		Select input
16	RCK	I		RDS demodulation clock input
17	RDT	I		RDS demodulation data input
18	OPEN			Open
19	$\overline{RDSLK}$	I		RDS LK signal input
20	$\overline{IRRST}$	I		Reset input
21	MOD0	I		Connect to GND
22	MOD1	I		Connect to GND
23	XIN	I		Crystal oscillating element connection pin
24	XOUT	O		Crystal oscillating element connection pin
25	VSS			GND
26	$\overline{DRST}$	O	C	Reset output
27,28	OPEN			Open
29	IRRDY	O	C	Communication ready output
30-33	ADD16-13	O		ROM address
34-41	ADD7-0	O		ROM address
42-49	DT7-0	I		ROM data input
50	VSS			GND
51	TEST	I		Test terminal
52	$\overline{IRSCK}$			Communication clock input
53	IRDO	O	C	Communication data output
54	IRDI	I		Communication data input
55,56	OPEN			Open
57	VCC			5V
58	SD	I		SD signal input
59	OPEN			Open
60-64	ADD8-12	O		ROM address

Format	Meaning
C	C MOS

*PD6191A



PD8034A

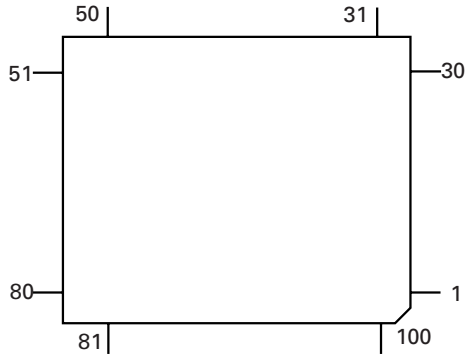


● **Pin Functions (PD4908A)**

Pin No.	Pin Name	I/O	Function and Operation
1	$\overline{\text{SWVDD}}$	O	GRIL:Power Output
2	$\overline{\text{DSENS}}$	I	Detach sense input
3	$\overline{\text{PSENS}}$	I	Grill eject button sense input
4	$\overline{\text{ISENS}}$	I	Illumination sense input
5	TESTIN	I	Test program input
6	$\overline{\text{IDRST}}$	O	ID-LOGIC:Mother Reset output (RDS:Reset output)
7	IDSEL	O	ID-LOGIC:Select output
8	$\overline{\text{IDCK}}$	O	ID-LOGIC:Clock input/output (RDS:SK input)
9	IDDI	I	ID-LOGIC:data input (RDS:decoder)
10	IDDO	O	ID-LOGIC:data output
11	$\overline{\text{RESET}}$		Reset input
12	XT2		Clock connection pin (OPEN)
13	XT1		Clock connection pin (VSS connection)
14	VSS		GND
15	X2		Main oscillator connection pin
16	X1		Main oscillator connection pin (12.582912MHz)
17	REGOFF		Regulator operation designate signal (VDD connection)
18	REGC		Regulator output sense capacity connection (VDD connection)
19	VDD		Power supply
20	ILMPW	O	Illumination output
21	SYSPW	O	System power control output
22	$\overline{\text{ADPW}}$	O	A/D converter power output
23	LCDPW	O	LCD back light power output
24	IPPW	O	IPBUS driver power control output
25	ASENBO	O	Slave Acc sense output
26	NC	O	Not used
27	TELIN	I	TELL mute output
28	MUTE	O	All mute output
29	DIM	O	Dimer output
30	FLPCLS	O	Auto flap motor close output
31	FLPOPN	O	Auto flap motor open output
32	$\overline{\text{FOPNSW}}$	I	Auto flap motor open SW input
33	$\overline{\text{FCLSSW}}$	I	Auto flap motor close SW input
34	FLPPW	O	Auto flap power output
35	NC	O	Not used
36	$\overline{\text{TMUTE}}$	O	TUNER mute output
37	STDPRO	I	DSP STD/PRO select input
38	SD	I	SD input
39	$\overline{\text{ST}}$	I	Stereo input
40	VSS		GND
41	VDD		Power supply
42-46	NC		Not used
47	DRELAY	O	DFS:Extral relay output (J:Antenna power output)
48	DRSENS	I	DFS:Door open/close sense input
49	DRSYS	O	DFS:Door system select output
50	$\overline{\text{DLED}}$	O	DFS:Alarm LED output
51	DLSENS	I	DFS:Door lock cancellation sense input
52	STCUT	O	DFS:Ignition cut off output
53	$\overline{\text{MOSENS}}$	I	DFS:Motion/Window damage sensor input
54	DALMON	O	DFS alarm ON output
55-60	NC	O	Not used
61	MCSENS	I	Mic sense input
62	PCL	O	Clock adjust output
63	$\overline{\text{BRXEN}}$	I/O	P-BUS:Communication input/output
64	$\overline{\text{BSRQC}}$	I	P-BUS:Communication request input (CD)
65	$\overline{\text{BSCK}}$	I/O	P-BUS:Data clock input/output (Test mode clock output)
66	BSI	I	P-BUS:Communication data input (Test mode data input)
67	BSO	I/O	P-BUS:Communication data output

Pin No.	Pin Name	I/O	Function and Operation
68	$\overline{\text{BRST}}$	O	P-BUS:Reset output
69	MICSEL	O	Mic select output
70	$\overline{\text{BSRQD}}$	I	P-BUS:Communication request input (DSP)
71,72	NC	O	Not used
73	TEST/VPP		IC test pin
74	SL	I	Signal level input
75,76	NC	O	Not used
77	SEL	I	Destination descrimination input
78	SOR0	O	Source select output 0
79	SOR1	O	Source select output 1
80	ALMSEL	O	DFS alarm select output
81	ADSEL	I	Mic select input
82	AVDD		A/D convertor power supply
83	AVREF1		A/D convertor standard voltage
84	AVSS		A/D convertor GND
85	RX	I	IP-BUS: Data input
86	TX	O	IP-BUS:Data output
87	GND	I	
88-90	NC	I	Not used
91	IDRDY	I	ID-LOGIC:Ready input
92	$\overline{\text{ASENS}}$	I	Acc sense input
93	$\overline{\text{BSENS}}$	I	B.up sense input
94	TUNPDI	I	PLL:Data input
95	KEYDT	I	GRIL:Data input
96	DPDT	O	GRIL:Data output
97	TUNPCK	O	PLL:Clock output
98	TUNPDO	O	PLL:Data output
99	TUNPCE	O	PLL:Chip enable output
100	PEE	O	PEE beep output

*PD4908A



● **Pin Functions (PD4906A)**

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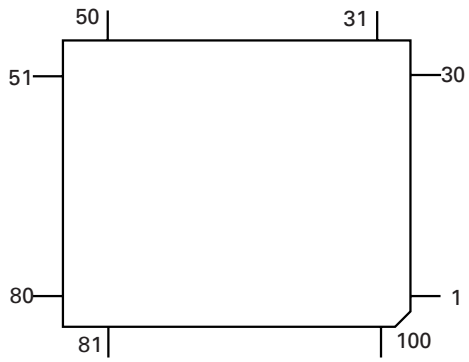
1	$\overline{\text{SWVDD}}$	O	GRIL:Power Output
2	$\overline{\text{DSENS}}$	I	Detach sense input
3	$\overline{\text{PSENS}}$	I	Grill eject button sense input
4	$\overline{\text{ISENS}}$	I	Illumination sense input
5	TESTIN	I	Test program input
6-10	NC	O	ID-LOGIC:Mother Reset output (RDS:Reset output)
11	$\overline{\text{RESET}}$		Reset input
12	XT2		Clock connection pin (OPEN)
13	XT1		Clock connection pin (VSS connection)
14	VSS		GND
15	X2		Main oscillator connection pin
16	X1		Main oscillator connection pin (12.582912MHz)
17	REGOFF		Regulator operation designate signal (VDD connection)
18	REGC		Regulator output sense capacity connection (VDD connection)
19	VDD		Power supply
20	ILMPW	O	Illumination output
21	SYSPW	O	System power control output
22	$\overline{\text{ADPW}}$	O	A/D converter power output
23	LCDPW	O	LCD back light power output
24	IPPW	O	IPBUS driver power control output
25	ASENBO	O	Slave Acc sense output
26	NC	O	Not used
27	TELIN	I	TELL mute output
28	MUTE	O	All mute output
29	DIM	O	Dimer output
30	FLPCLS	O	Auto flap motor close output
31	FLPOPN	O	Auto flap motor open output
32	$\overline{\text{FOPNSW}}$	I	Auto flap motor open SW input
33	$\overline{\text{FCLSSW}}$	I	Auto flap motor close SW input
34	FLPPW	O	Auto flap power output
35	NC	O	Not used
36	$\overline{\text{TMUTE}}$	O	TUNER mute output
37	STDPRO	I	DSP STD/PRO select input
38	SD	I	SD input
39	$\overline{\text{ST}}$	I	Stereo input
40	VSS		GND
41	VDD		Power supply
42-46	NC	O	Not used
47	DRELAY	O	DFS:Extral relay output (J:Antenna power output)
48	DRSENS	I	DFS:Door open/close sense input
49	DRSYS	O	DFS:Door system select output
50	$\overline{\text{DLED}}$	O	DFS:Alarm LED output
51	DLSENS	I	DFS:Door lock cancellation sense input
52	STCUT	O	DFS:Ignition cut off output
53	$\overline{\text{MOSENS}}$	I	DFS:Motion/Window damage sensor input
54	DALMON	O	DFS alarm ON output
55-60	NC	O	Not used
61	MCSENS	I	Mic sense input
62	PCL	O	Clock adjust output
63	$\overline{\text{BRXEN}}$	I/O	P-BUS:Communication input/output
64	$\overline{\text{BSRQC}}$	I	P-BUS:Communication request input (CD)
65	$\overline{\text{BSCK}}$	I/O	P-BUS:Data clock input/output (Test mode clock output)
66	BSI	I	P-BUS:Communication data input (Test mode data input)
67	BSO	I/O	P-BUS:Communication data output
68	$\overline{\text{BRST}}$	O	P-BUS:Reset output
69	MICSEL	O	Mic select output
70	$\overline{\text{BSRQD}}$	I	P-BUS:Communication request input (DSP)
71,72	NC	O	Not used

Pin No.	Pin Name	I/O	Function and Operation
73	TEST/VPP		IC test pin
74	SL	I AD	Signal level input (A/D)
75,76	NC	O	Not used
77	SEL	I	Destination descrimination input
78	SOR0	O	Source select output 0
79	SOR1	O	Source select output 1
80	ALMSEL	O	DFS alarm select output
81	ADSEL	I	Mic select input
82	AVDD		A/D convertor power supply
83	AVREF1		A/D convertor standard voltage
84	AVSS		A/D convertor GND
85	RX	I	IP-BUS: Data input
86	TX	O	IP-BUS:Data output
87	GND	I	
88-91	NC	I	Not used
92	$\overline{\text{ASENS}}$	I	Acc sense input
93	$\overline{\text{BSENS}}$	I	B.up sense input
94	TUNPDI	I	PLL:Data input
95	KEYDT	I	GRIL:Data input
96	DPDT	O	GRIL:Data output
97	TUNPCK	O	PLL:Clock output
98	TUNPDO	O	PLL:Data output
99	TUNPCE	O	PLL:Chip enable output
100	PEE	O	PEE beep output

*PD4906A

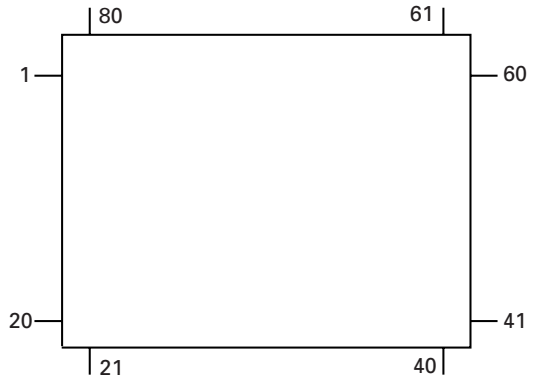


● **Pin Functions (PD4931A)**

Pin No.	Pin Name	I/O	Format	Function and Operation
1	FOK	I		Focus OK input
2	MIRR	I		Mirror detect input
3	LOCK	I		Spindle lock input
4	AVss			A/D GND electric potential
5	NC			Not used
6	EMPH	O	C	Pre-emphasis output
7	AVREF1	I		A/D Reference electric potential input
8	TSI	I		Decode IC serial data input
9	NC			Not used
10	$\overline{\text{TSCK}}$	O	C	Decode IC serial clock output
11	XSI	I		Serial data input from CD LSI
12	XSO	O	C	Serial data output to CD LSI
13	$\overline{\text{XSCK}}$	O	C	Serial clock output to CD LSI
14	XA0	O	C	CD LSI command/data control output
15	$\overline{\text{XSTB}}$	O	C	Strobe output to CD LSI
16	NC			Not used
17	BDATA	I/O	C	P-Bus serial data input/output
18	$\overline{\text{BSCK}}$	I/O	C	P-Bus serial clock input/output
19	$\overline{\text{XRST}}$	O	C	CD LSI reset output
20	CONT	O	C	Servo driver voltage control output
21	CD5VON	O	C	CD +5V power supply control output
22	VDCONT	O	C	VD power supply control output
23	CDMUTE	O	C	CD Mute control output
24	CDEJET	O	C	Loading Motor Eject control output
25	CDLOAD	O	C	Loading Motor Load control output
26	BMUTE	O	C	Bus mute output
27	$\overline{\text{CLAMP}}$	I		Disc clamp SW input
28	$\overline{\text{CRST}}$	O	C	Compressor IC reset output
29	CBANK0	O	C	Compressor IC bank set output 0
30	CBANK1	O	C	Compressor IC bank set output 1
31	CBANK2	O	C	Compressor IC bank set output 2
32	$\overline{\text{CCS}}$	O	C	Compressor IC chip select
33	Vss			GND electric potential
34	DSET	O	C	Disc set indicator light output
35	SCONT	O	C	Spindle double speed output
36-54	NC			Not used
55	ERREJ	I		Disc eject select input at the error
56	$\overline{\text{CSENS}}$	I		Ope-fla close sense input
57	TXARI	I		TX output select input
58	BSRQ	I/O	C	P-Bus service request output
59	BRXEN	I/O	C	P-Bus reception enable status
60	$\overline{\text{RESET}}$	I		System reset input
61	NC			Not used
62	$\overline{\text{BRST}}$	I		P-Bus Reset input
63	$\overline{\text{DQSY}}$	I		TEXT decode read permission input
64-66	NC			Not used
67	$\overline{\text{ADENA}}$	O	C	A/D reference voltage supply control input
68	VDD			Positive power supply
69	X2			Main clock oscillator connection pin
70	X1			Main clock oscillator connection pin
71	IC(Vpp)			Internally Connected (Vss)
72	NC			Not used
73	$\overline{\text{TESTIN}}$	I		Test program start input
74	AVpp			A/D analog power supply
75	AVREF0			A/D reference voltage input
76	EJTENS			Disc eject position sense input
77	DSCSNS			Disc set defect input

Pin No.	Pin Name	I/O	Format	Function and Operation
78	VDSENS	I		VD short sense input
79	TEMP	I		Temperature sense input
80	NC			Not used

*PD4931A

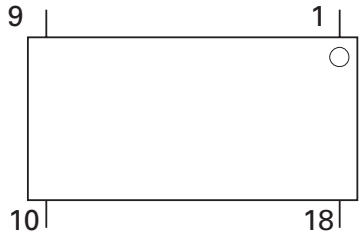


Format	Meaning
C	C MOS

● **Pin Functions (PD0236AM)**

Pin No.	Pin Name	I/O	Function and Operation
1	BCSEL	I	Bit clock fs select
2	DASEL	I	Bit expand select
3	NC		Not used
4	LRSEL		LRCKO polarity select
5	LRCKO	O	LRCKO output
6	NC		Not used
7	BCKO	O	Bit clock output
8	DATAO	O	Data output
9	GND		GND
10	VDD		Power supply terminal
11	LRCKI	I	LRCKO input
12,13	NC		Not used
14	DATAI	I	Data input
15	BCKI	I	Bit clock input
16	NC		Not used
17	SEL	I	Bit expand/input data output select
18	XRST	I	Reset input

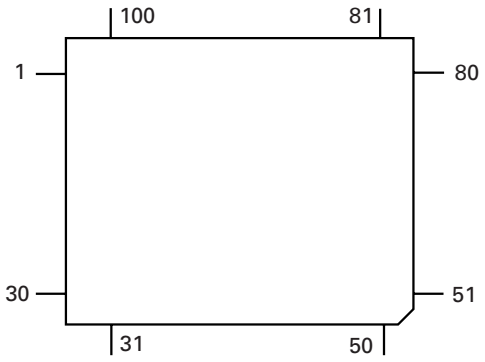
PD0236AM



● **Pin Functions (PD6237B)**

Pin No.	Pin Name	I/O	Format	Function and Operation
1-9	NC			Not used
10	RDX	O	C	Address bus read strobe output
11	VSS	O	C	Digital GND
12	WRX	O	C	Address bus write strobe output
13-18	NC			Not used
19	KYDT	O	C	Key data to system micro-computer
20	DPDT	I		Display data from system micro-computer
21	SCDCLK	I		Test program clock
22	DATAOT	O	C	Test program data
23	Vcc			Digital GND
24	DATAIN	I		Test program data
25,26	NC			Not used
27	C			Reference voltage
28-33	NC			Not used
34	AVcc			Analog power supply
35,36	NC			Not used
37	AVSS			Analog GND
38	ILM1	O	C	Illumination control output 1
39	ILM2	O	C	Illumination control output 2
40,41	NC			Not used
42	GND			Digital GND
43-48	NC			Not used
49	MD0	I		Mode pin 0 (PULL-UP)
50	MD1	I		Mode pin 1 (PULL-UP)
51	MD2	I		Mode pin 2 (PULL-DOWN)
52	HSTX	I		Hardware standby input (PULL-UP)
53	REMIN	I		Remote control pulse input
54-58	NC			Not used
59-62	KST0-KST3	O	C	Key scan output
63,64	NC			Not used
65	RES1	O	C	SED1450 Reset output
66	RES2	O	C	SED1526 Reset output
67-70	KDT0-KDT3	I	C	
71-73	NC			Not used
74	OSCK4K	O	C	SED1540 Clock output
75-77	NC			Not used
78	CS1	O	C	SED1526 Top lank chip select output
79	CS2	O	C	SED1526 Bottom lank chip select output
80	CS3	O	C	SED1540 chip select output
81	VSS			Digital GND
82,83	X0,X1			Oscillation circuit
84	Vcc			Digital power supply
85-92	AD00-AD07	I/O	C	External data bus input/output
92	AD07	I/O	C	External data bus input/output
93	A0	O	C	External address output
94-100	NC			Not used

*PD6237B

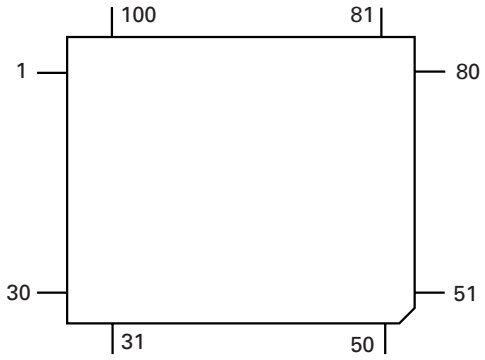


Format	Meaning
C	C MOS
N	N channel open drain

● **Pin Functions (SED1540F0A)**

Pin No.	Pin Name	I/O	Function and Operation
1-72	SEG71-0	O	Output for driving segment of LC
73	A0	I	Normally the lowest bit in the address bus of MPU is connected to distinguish between data and command.
74,75	OSC1,2		Terminal to connect resistor for internal oscillation
76	E($\overline{RD}$)	I	Enable clock input terminal of 68-system MPU Terminal to connect RD signal of 80-system MPU. While this signal is set to "L," data bus of SED1540 will be output.
77	R/$\overline{W}$($\overline{WR}$)	I	Input terminal of read/write control signal Terminal to connect write signal of 80-system MPU
78	VSS		0V connect to system GND
79-86	DB0-7		8-bit duplex data bus to be connected to a data bus of 8-bit or 16-bit standard MPU
87	VDD		Connect to +5V power supply VDD
88	$\overline{RES}$		Can be set to initial setting by setting RES to "L" when using 68-system MPU, or by setting RES to "H" when using 80-system MPU.
89	FR	I/O	Input/output terminal of LC alternating signal
90	V3		Multilevel power supply for driving LC
91	$\overline{CS}$	I	Chip select signal. Normally, signal obtained by decoding address bus signal is input.
92	NC		Not used
93	M/S		Terminal to select between master and slave operation to SED1540. Connect to VDD or VSS.
94,95	V2,1		Multilevel power supply for driving LC
96-99	COM0-3	O	Output for LC common (low) driving
100	SEG72	I/O	Output for driving segment of LC

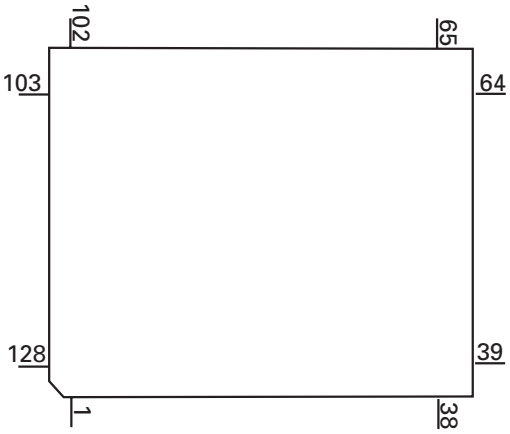
SED1540F0A



● **Pin Functions (SED1526F0A)**

Pin No.	Pin Name	I/O	Function and Operation
1-5	V1-V5		Multilevel power supply for driving LCD
6	VR	I	Voltage adjustment
7	VDD		+5V power supply
8	VOUT	O	Ascending voltage output
9	CAP2-	O	Ascending voltage capacitor connection
10	CAP2+	O	Not used
11	CAP1-	O	Ascending voltage capacitor connection
12	CAP1+	O	Ascending voltage capacitor connection
13	VSS		GND
14	M/S	I	IC master/slave operation select
15	SR2	I	MPU interface select, Parallel/serial data input select, Reset input select
16	SR1	I	MPU interface select, Parallel/serial data input select, Reset input select
17	$\overline{WR}$	I	MPU WR signal connection
18	$\overline{RD}$	I	MPU RD signal connection
19	CS2	I	Chip select signal
20	CS1	I	Chip select signal
21	A0	I	Data/command discrimination
22	FR	O	Not used
23	CL	O	Not used
24-31	D0-D7	I/O	Serial data bus
32-39	COM0-7	O	Output for LCD common driving
40-48	NC		Not used
49-110	SEG0-61	O	Output for driving segment of LCD
111-128	NC		Not used

SED1526F0A

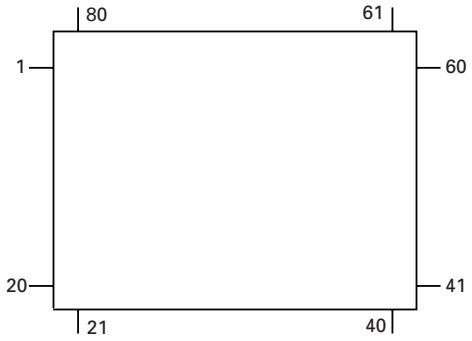


● **Pin Functions (PD5445A)**

Pin No.	Pin Name	I/O	Format	Function and Operation
1	SPCK	I	C	Connect to GND
2	NC			Not used
3	VST	O	C	Electronic volume strobe output
4	VDT	O	C	Electronic volume data output
5	VCK	O	C	Electronic volume clock output
6	CNVss	I		Connect to Vss
7	MCKRQ	I	C	CD unit MCK request input
8	NC			Not used
9	$\overline{\text{RESET}}$	I		Micro-computer hard reset input
10	Xout	O		System clock output
11	Vss	I		GND
12	Xin	I		System clock input
13	Vcc	I		Micro-computer power supply 5V
14	$\overline{\text{NMI}}$	I	C	Connect to Vcc
15	BMUTEIN	I	C	CD unit LR clock supply data
16	SPRQ	I	C	Connect to GND
17	$\overline{\text{BRST}}$	I	C	P-Bus reset input
18	ADTEST	I	C	A.EQ test mode start
19	MICSNS	I	C	A.EQ mic connection data
20	ADSEL	O	C	Signal/A.EQ mic input select
21	MUTERQ	O	C	Hard mute output
22,23	NC			Not used
24	DSPOUT	O	C	DSP serial data output
25	DSPIN	I	C	DSP serial data input
26	DSPCK	O	C	DSP serial clock output
27	NC			Not used
28	BSO	O	C	P-BUS data output
29	BSI	I	C	P-BUS data input
30	BSCK	I/O	C	P-BUS serial clock input/output
31	NC			Not used
32	$\overline{\text{BSRQ}}$	I/O	C	Service request input
33	$\overline{\text{BRXEN}}$	I/O	C	Reception enable input
34,35	DSPERR1	I	C	Connect to GND
36	DZF1	I	C	Front digital 0 data input
37	DZF0	I	C	Rear digital 0 data input
38	DZF2	I	C	Sub woofer digital 0 data input
39	$\overline{\text{TESTIN}}$	I	C	test program start/enable
40	DSPPW	O	C	DSP power supply switching
41	NGO	O	C	Noise gate ON/OFF
42-48	NC			Not used
49	FMUTE	O	C	Not used
50	SWMUTE	O	C	Not used
51	VOICE	I	C	Connect to GND
52-58	NC			Not used
59	IFHIZ	I	C	DSP micro-computer port Hiz set (test mode port)
60	$\overline{\text{DSPRST}}$	O	C	TC9331 hard reset
61	$\overline{\text{PD}}$	O	C	AK7712 power down
62	$\overline{\text{AKRST}}$	O	C	AK7712 reset
63	$\overline{\text{DSPCS2}}$	O	C	AK7712 chip select
64	$\overline{\text{DSPCS1}}$	O	C	TC9331 chip select
65	$\overline{\text{DSPRQ}}$	O	C	AK7712 data output request
66	DSPC$\overline{\text{D}}$	O	C	TC9331 command/data
67	DSPRDY	I	C	AK7712 data ready
68	$\overline{\text{DSPACK}}$	I	C	DSP data write ready/ACK
69	SMODE	O	C	AK7712 master/slave
70	EMPIN	I	C	CD unit emphasis data input
71	$\overline{\text{EMPOUT}}$	O	C	DAC emphasis output

Pin No.	Pin Name	I/O	Format	Function and Operation
72	LRCKK	O	C	LRCK/BCLK select
73	SDATAK	O	C	Audio data select:LRCKK inverted gate
74	NOISE	I		ASL noise input
75	AVss	I		Connect Vss
76	MCKOUT	O	C	CD MCLK gate control
77	Vref	I		AD select reference voltage input
78	AVcc	I		Connect to Vcc
79	MO/ST	I	C	Connect to GND
80	NC			Not used

*PD5445A



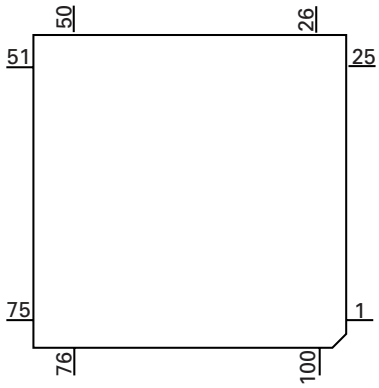
Format	Meaning
C	C MOS

● **Pin Functions (AK7712AVT)**

Pin No.	Pin Name	I/O	Function and Operation
1	TSTI1	I	Test input 1
2	OPCL	I	ADC,DAC connection select
3	$\overline{\text{PDAD}}$	I	AD reset control
4	$\overline{\text{PDDA}}$	I	DA reset control
5	$\overline{\text{PD}}$	I	Power down
6	$\overline{\text{RST}}$	I	Reset input
7	TSTIO1	I/O	Test input/output 1
8	TSTIO2	I/O	Test input/output 2
9	TSTIO3	I/O	Test input/output 3
10,11	DVB		Digital PCB power supply
12	SDIN2	I	Serial data input 2
13	SDAD	O	Serial data output 2
14	SDOUT2	O	Serial data output 3
15	SDDA	I	Serial data input 3
16	SDDA2	I	Serial data input 4
17	SDOUT3	O	Serial data output 4
18	SDOUT1	O	Serial data output 1
19	SDIN1	I	Serial data input 1
20	SMODE	I	Interface clock select
21	BCLK	I/O	Clock input/output for serial data input signal input/output
22	LRCK	I/O	L/R channel identification signal input/output
23	CLK0	O	Master clock output
24	DVDD		Digital power supply
25	DVSS		Digital GND
26	XTI	I	Clock input
27	XTO	O	Oscillator output
28	TSTI2	I	CLKO output control
29	$\overline{\text{CS}}$	I	Chip select input for micro-computer interface
30	$\overline{\text{WRQ}}$	I	Command register reset input for micro-computer interface
31	DVSS		Digital GND
32	DVDD		Digital power supply
33	SCLK	I	Serial data input clock input for micro-computer interface
34	SI	I	Serial data input for micro-computer interface
35	WRDY	O	Data write ready output for micro-computer interface
36	DRDY	O	Output data ready output for micro-computer interface
37	SO	O	Serial data output for micro-computer interface
38	$\overline{\text{CASRF}}$	O	External DRAM CAS/pseudo SRAM refresh
39	$\overline{\text{RASCE}}$	O	External DRAM RAS/pseudo SRAM-ce
40	$\overline{\text{WE}}$	O	External SRAM/pseudo SRAM/DRAM write signal output
41-48	A16-A9	O	External RAM address output
49	DVSS		Digital GND
50	DVDD		Digital power supply
51-59	A8-A0	O	External RAM address output
60	$\overline{\text{OE}}$	O	External SRAM/pseudo SRAM/DRAM output enable signal output
61-68	IO0-IO7	I/O	External RAM data input/output
69	DVSS		Digital GND
70	DVDD		Digital power supply
71	DZFSET	I	Zero position detect setup
72	DVSS		Digital GND
73	DVDD		Digital power supply
74,75	DVB		Digital PCB power supply
76	DZF2	O	Zero input detect (DAC2)
77	DZF1	O	Zero input detect (DAC1)
78	NC		Not used
79	AVB		Analog PCB power supply
80	AOUTR2	O	DAC2 Rch analog output 2
81	AOUTL2	O	DAC2 Lch analog output 2
82	NC		Not used

Pin No.	Pin Name	I/O	Function and Operation
83	AOUTR1	O	DAC1 Rch analog output 1
84	AOUTL1	O	DAC1 Lch analog output 1
85	VRDAL	I	DAC reference voltage input
86	AVSS		Analog GND
87	AVDD		Analog power supply
88	VRDAH	I	DAC reference voltage input
89	NC		Not used
90	AINR-	I	ADC Rch analog inverted input
91	AINR+	I	ADC Rch analog input
92	AINL-	I	ADC Lch analog inverted input
93	AINL+	I	ADC Lch analog input
94	VCOM	O	Common voltage
95	VRADL	I	ADC reference voltage input
96	AVSS		Analog GND
97	AVDD		Analog power supply
98	VRADH	I	ADC reference voltage input
99	AVB		Analog PCB power supply
100	NC		Not used

AK7712AVT



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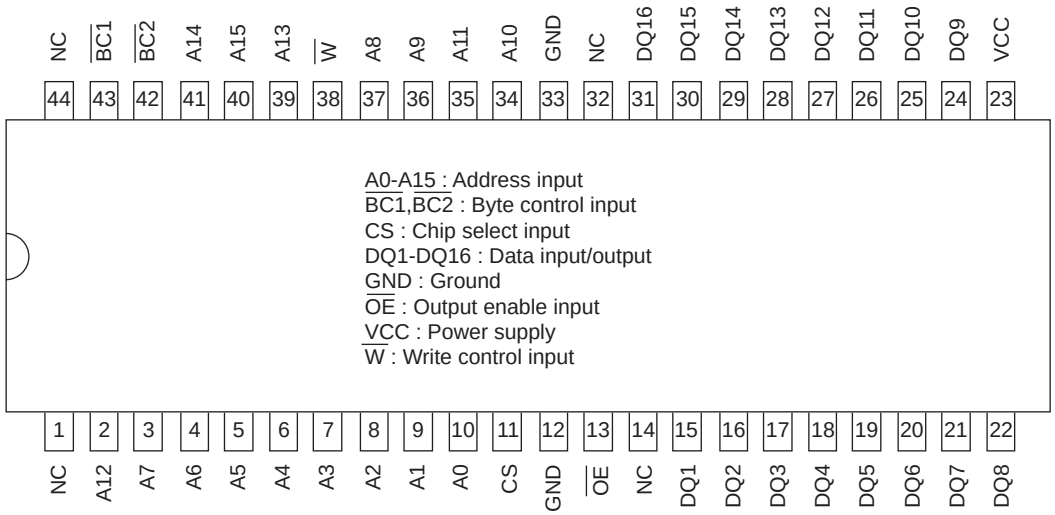

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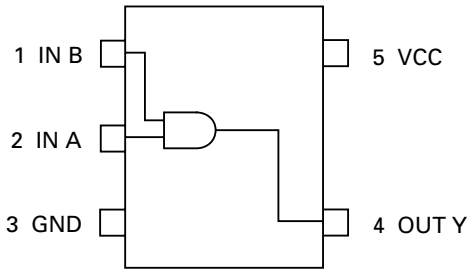

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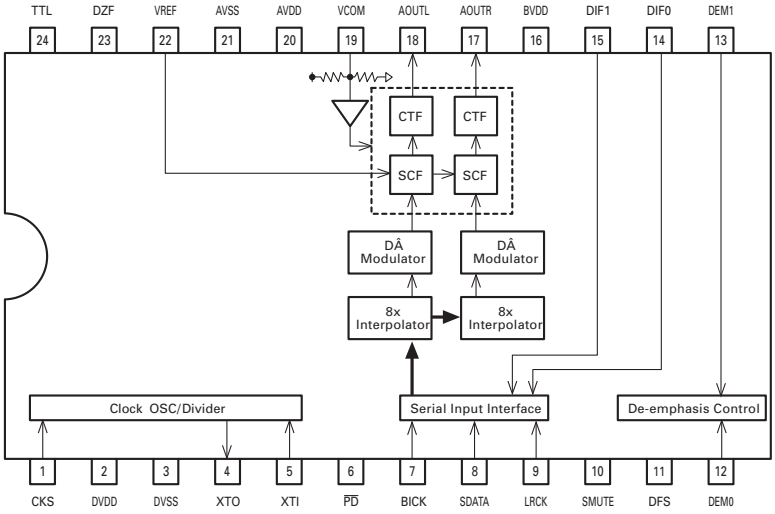
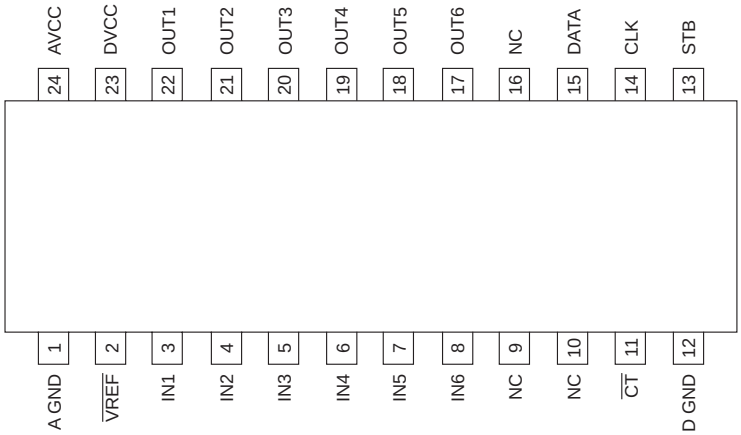


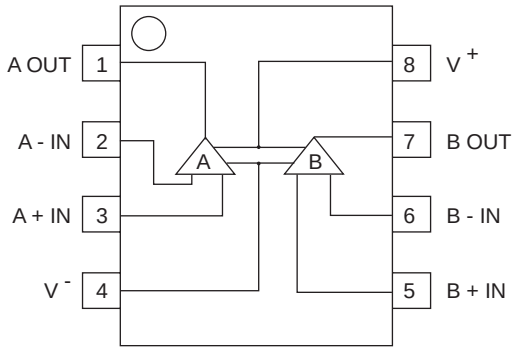
● Pin Functions (PM0017AM)

Pin No.	Pin Name	Function and Operation
1	AGND	Analog GND
2	$\overline{\text{VREF}}$	Reference voltage noise cut
3-8	IN1-6	CH1-6 input
9,10	NC	Not used
11	$\overline{\text{CT}}$	Terminal to set forced switching time
12	DGND	Digital GND
13	STB	Strobe input
14	CLK	Clock input
15	DATA	Data input
16	NC	Not used
17-22	OUT6-1	CH6-1 output
23	DVCC	Digital GND
24	AVCC	Analog GND

PM0017AM

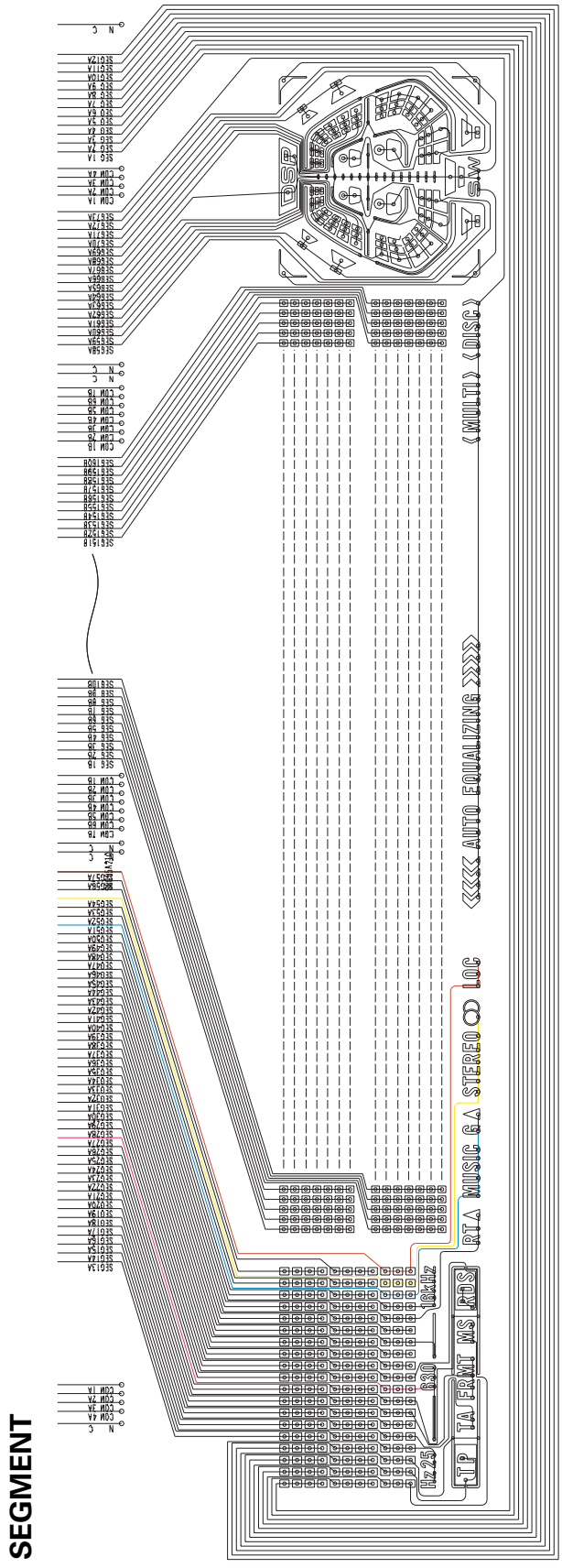


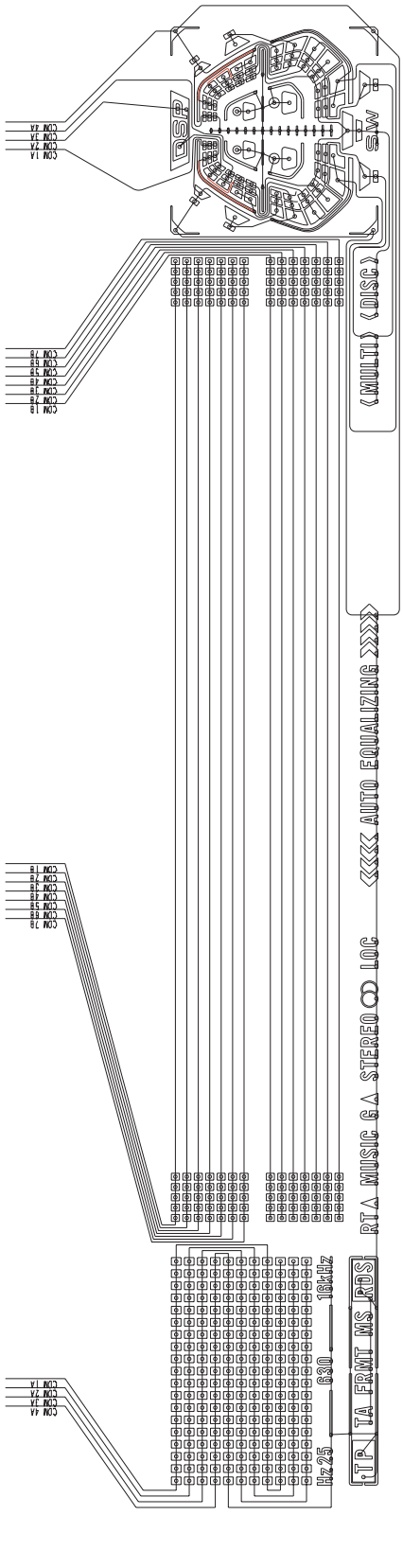
NJM4580M



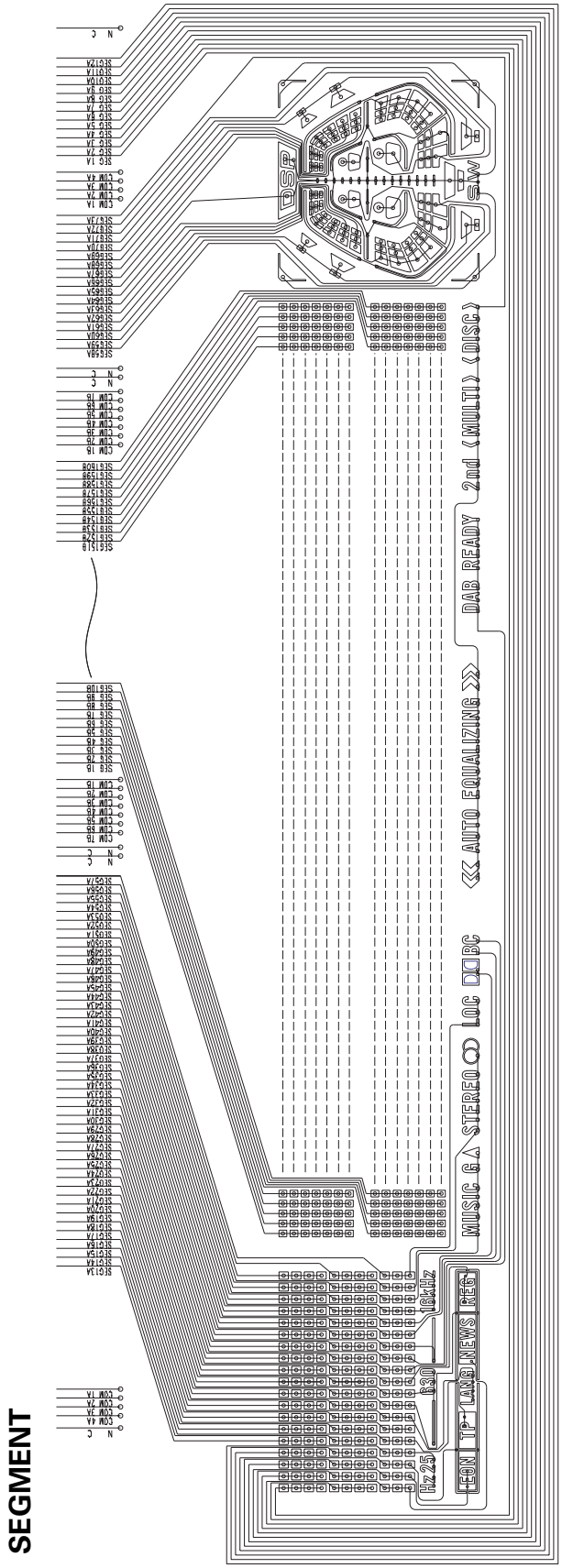
7.1.2 DISPLAY

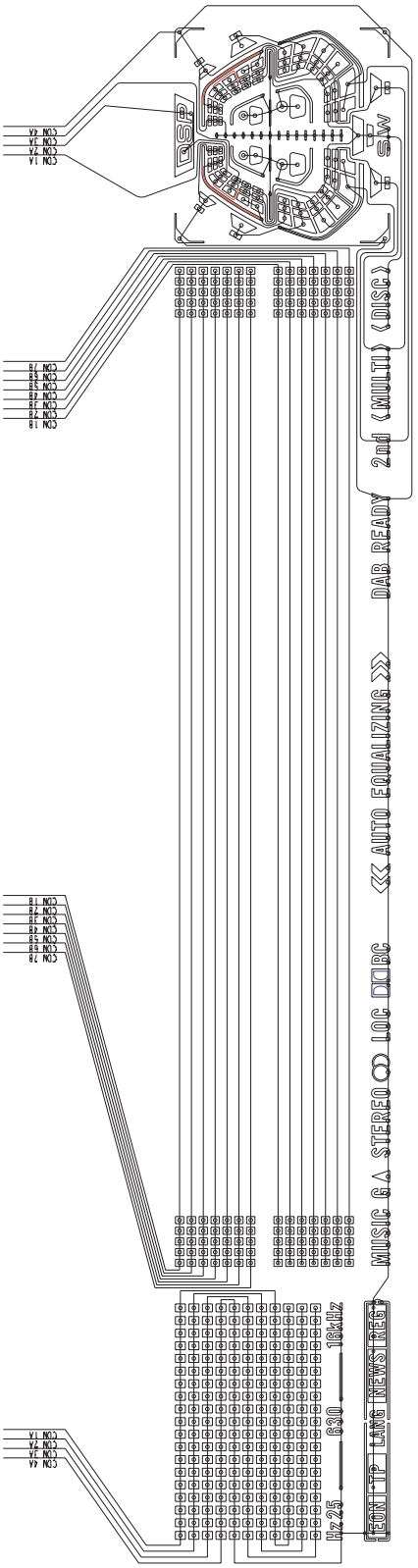
● **CAW1470 (DEX-P1R/UC)**





● CAW1471 (DEH-P946/ES,DEX-P1/ES)



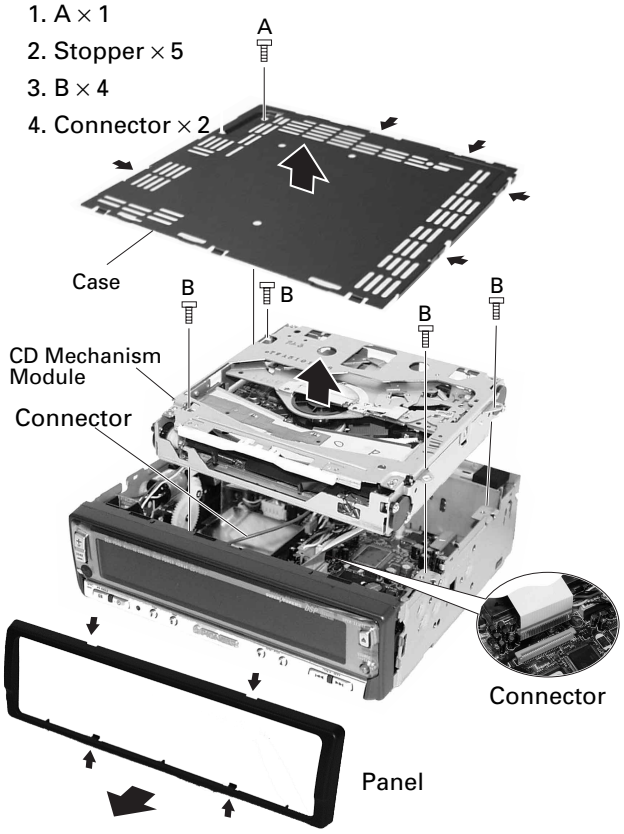


7.2 DIAGNOSIS

7.2.1 DISASSEMBLY

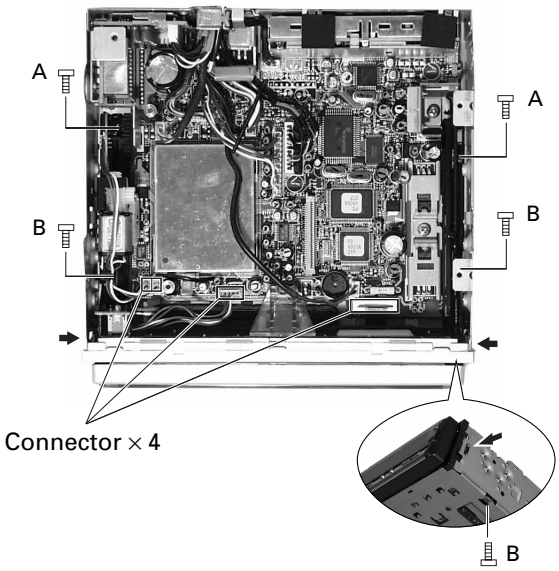
● Removing the Case,Panel and CD Mechanism Module

1. A × 1
2. Stopper × 5
3. B × 4
4. Connector × 2



● Removing the Panel Assy

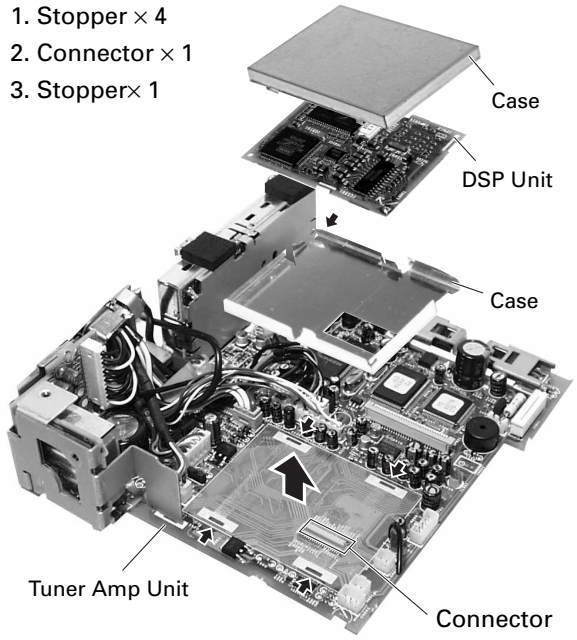
1. A × 2
2. B × 2
3. Connector × 4
4. Stopper × 2



Note : Remove the Screw B from outside the bottom.

● Removing the DSP Unit

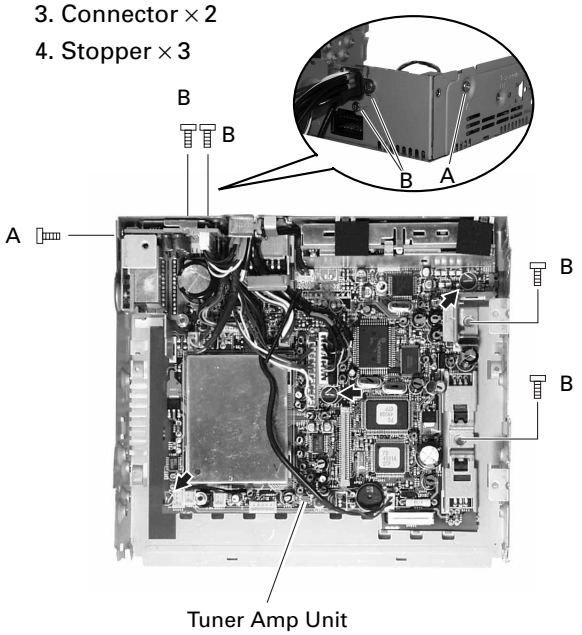
1. Stopper × 4
2. Connector × 1
3. Stopper× 1



Note : Each five place stopper are soldered.

● Removing the Tuner Amp Unit

1. A × 1
2. B × 4
3. Connector × 2
4. Stopper × 3



7.2.2 TEST MODE

● Error Number Indication

The system enters error mode to display the cause of error with a number when the system cannot operate CD or stops operation because of an error. The purpose of this measure is to reduce frequency of calls from users asking help for problems that are caused by incorrect operation by user, as well as to assist analysis and repair in servicing.

(1) Basic means of display

- An error code will be written on DMIN (minute area for display) and DSEC (second area for display) when CSMOD (CD mode area for system) is SERBORM.
  The same data will be written on DMIN and DSEC.
  DTNO shall be blank as before.
- Display examples of the head unit
  Error codes will be displayed as shown below, depending on the capability of LCD. An error number will be displayed in the place of "xx."
- 8-digit display ERROR-XX

With OEM products, display of error codes shall be according to the specificatins of the manufacturer.

(2) Error codes

Error code	Classification	Description	Cause / Detail
10	ELECTRIC	Carriage home failure	Carriage doesn't move to or from the innermost position →Home switch failed and/or carriage immobile
11	ELECTRIC	Focus failure	Focus failed →Defects, disc upside-down, severe vibration
12	ELECTRIC	SETUP failure Subcode failure	Spindle failed to lock or subcode unreadable →Spindle defective, defect, severe vibration
14	ELECTRIC	Mirror failure	Unrecorded CD-R The disc is upside-down, defects, vibration
17	ELECTRIC	Set up failure	AGC protect failed →Defects, disc upside-down, severe vibration
19	ELECTRIC	Improper T.BAL adjustment	Value of T.BAL adjustment is out of parameter.
30	ELECTRIC	Search time out	Failed to reach target address →Carriage / tracking defective and/or defects
A0	SYSTEM	Power failure	Power overvoltage or short circuit detected →Switching transistor defective and/or power abnormal

(3) Number of error codes

One hundred error codes (00 to 99) will be available.

(4) Remarks

- Error codes are not displayed for the mechanism alone (because CD is OFF when an mechanical error is generated).
- When the system cannot read TOC, it is not deemed as an error, and the system continues operation to a certain extent.
- Be sure to take measures as shown in the display examples whenever designing a new head unit.
- The first digit of an error code has a meaning as follows:
  1X : Error related to setup
  3X : Error related to the search function
  AX : Other errors

● New Test Mode

When S-CD is specified as the source, basically the system plays as normal operation. After setup, the system displays the cause and time (absolute time) of an error if focus search is improper, spindle lock is removed, subcode cannot be read, or sound is skipped. During setup, the system displays the operation status of CD control software (internal RAM : CPOINT). The purpose of these displays and functions are to detect aging of servicing, as well as to improve efficiency of defect analysis.

(1) How to enter NEW TEST Mode

1. Reset the system by pressing keys (depending on the product) to enter the conventional Test mode.
2. Select S-CD as the source by pressing the source or CD key, then inserting a disc. Confirm that the regulator is OFF. Press the Switch Jump Mode key.
3. After that, the system will stay in the new Test mode, regardless of whether S-CD is OFF or ON.

To exit from the new Test mode, reset the system.

See the test mode flow chart Page 95.

(2) Relations of keys

keys	Test Mode		New Test Mode	
	Regulator OFF	Regulator ON	PLAY in progress	Error Protection
BAND	To Regulator ON	To Regulator OFF	—	Time / Err No.select
→	—	FWD-Kick	FF / TR+	—
←	—	REV-Kick	REV / TR-	—
1	—	Tracking Close	Scan	—
2	—	Tracking Open	RPT	—
3	—	Focus Close	RDM	—
—	—	Focus Open	—	—
—	—	Jump Off	—	—
6	To New Test Mode	Jump Mode select	Auto / Manu	T.No. / Time select

Operations, such as EJECT, CD ON/OFF are performed normal mode.

(3) Error Cause, Error Code

Code	Classification	Description	Cause / Details
40	ELECTRIC	Put out of focus	FOK=Low has continued for 100 msec →Damaged or soiled disc. vibration, or detective servo
41	ELECTRIC	Spindle unlock	LOCK=has continued for 100 msec →Damaged or soiled disc. vibration, or detective servo
42	ELECTRIC	Failed to read subcode	The system could not read subcode for 100 msec →Damaged or soiled disc. vibration, or detective servo
43	ELECTRIC	Sound skipped	The last-address-memory function activated →Damaged or soiled disc. vibration, or detective servo

There will be no mechanical error during aging. Error codes should be displayed in the same manner as in Normal mode.

● S-MD Test Mode

This mode is used by service personnel to solve problems when the mechanism is malfunctioned. Normally users do not enter S-MD Test mode.

(1) Test mode input

1) How to input

Input in the same manner as with inputting in Test mode of CDS, CDM, etc.

To enter Test mode, reset the system and set ACC to ON or connect the detach grill, then press xx and xx keys (see CD) simultaneously. Then, use the SOURCE key (or TAPE or SOURCE key on the remote control unit) to activate MDS source, and input in MDS Test mode.

Normally, the system does not change to MDS source when no disc is loaded. In Test mode, the system changes to MDS source without a disc loaded, and enters Test mode.

2) Beep sound

• With '97 autumn or later models, the system beeps to confirm that the system has entered Test mode.

(2) Canceling Test mode

1) Internal MDS (P-BUS)

• With '97 autumn or later models, reset the system, set ACC to OFF, BACKUP to OFF, or disconnect the detach grill to cancel Test mode. (Set ctestf to 0 if Clear RAM is called as preprocessing of standby.)

2) Slave MDS (IP-BUS)

In addition to the method mentioned in 1), Slave MDS must be reset, too.

(3) Effective keys in Test mode

In Test mode, some keys require special key decoding.

Key name	Key operation
BAND	To turn the POWER ON/OFF
→	To move thread, jump, change set values, etc
←	To move thread, jump, change set values, etc
▲	To advance MENU
▼	To reverse MENU
PGM	To enter Test STOP mode
FUNCTION	To select a MENU
DISP	SRV mode (To change the disc type.)

Keys not provided on the main unit can be found on the remote control unit.

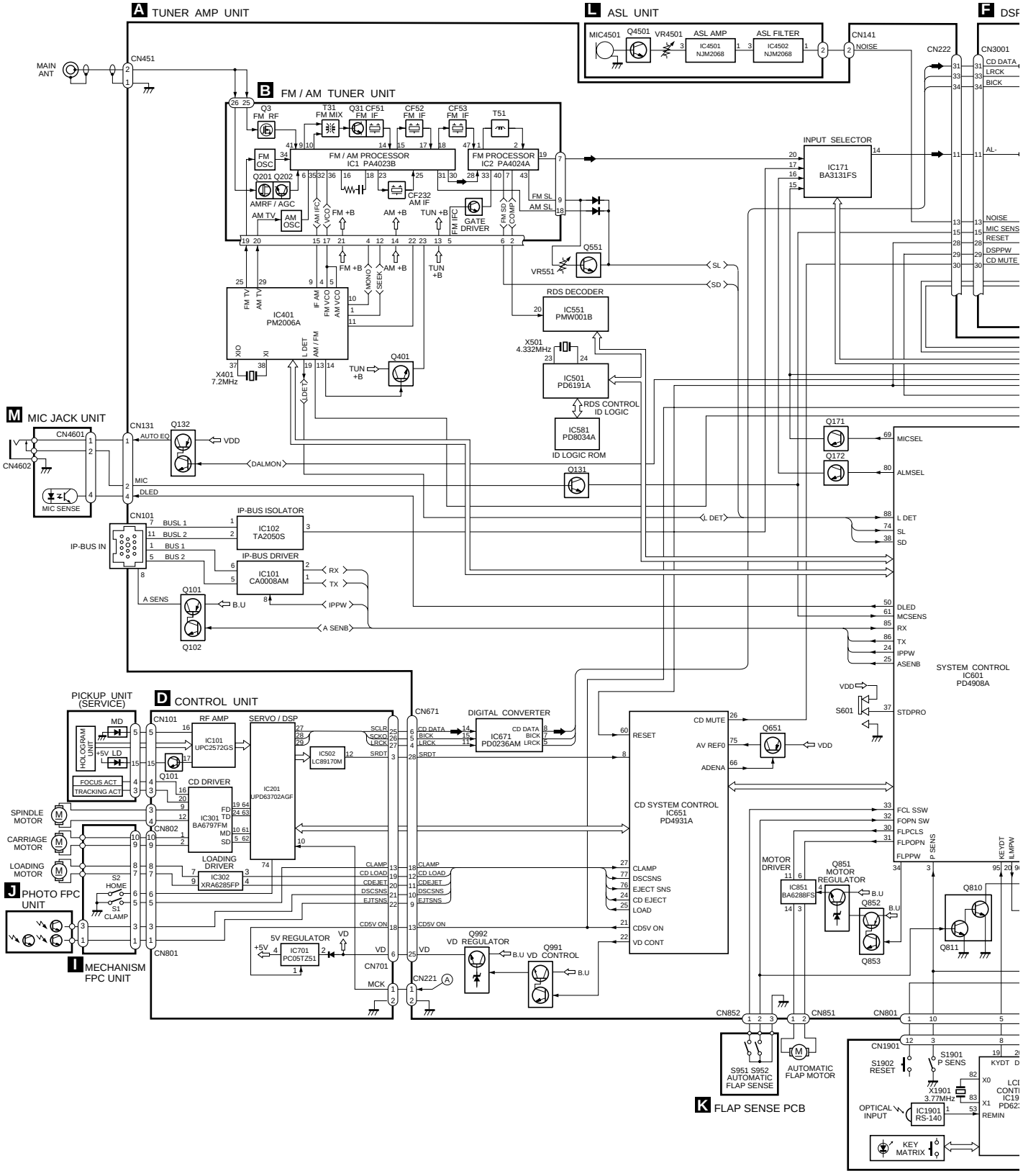
Operation specifications and details are in accordance with the specifications of MDS.

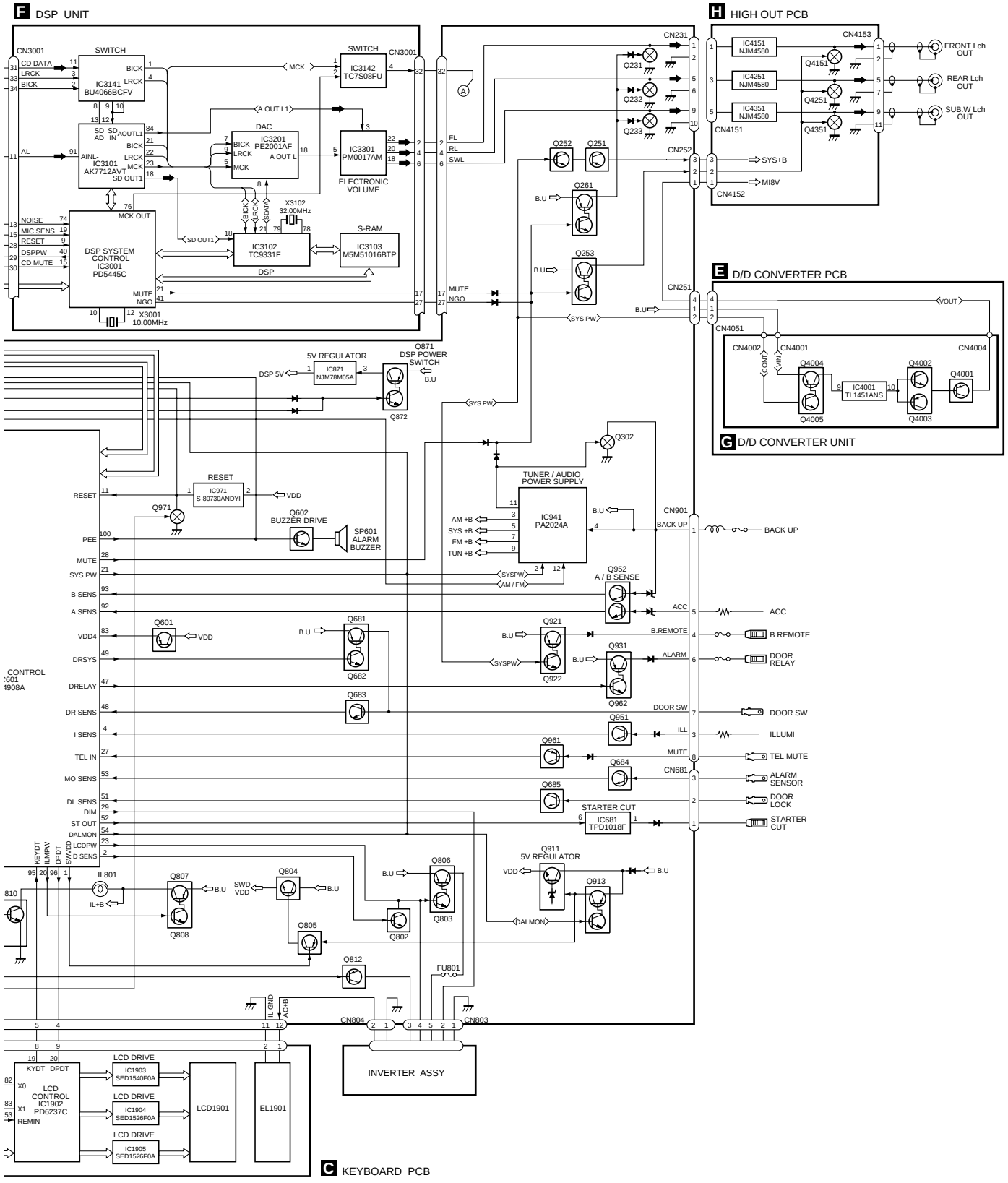
● **SYSTEM Test Mode**

Function	Operation Key · Trigger	Remarks	Display
Display Test Mode	Set Acc to ON or connect the detach grille, while pressing the S/A and → keys simultaneously. Then, press the S/A and → keys simultaneously, while the source is ON. To cancel Display Test Mode, press the Reset button.	Immediately after resetting the system	All LCDs light up.
TEST MODE	Set ACC to ON or connect the detach grille, while pressing the CLOCK and ← keys simultaneously. To cancel Test Mode, set ACC to OFF or press the Reset button.	Immediately after resetting the system	

7.3 BLOCK DIAGRAM

● DEX-P1R/UC

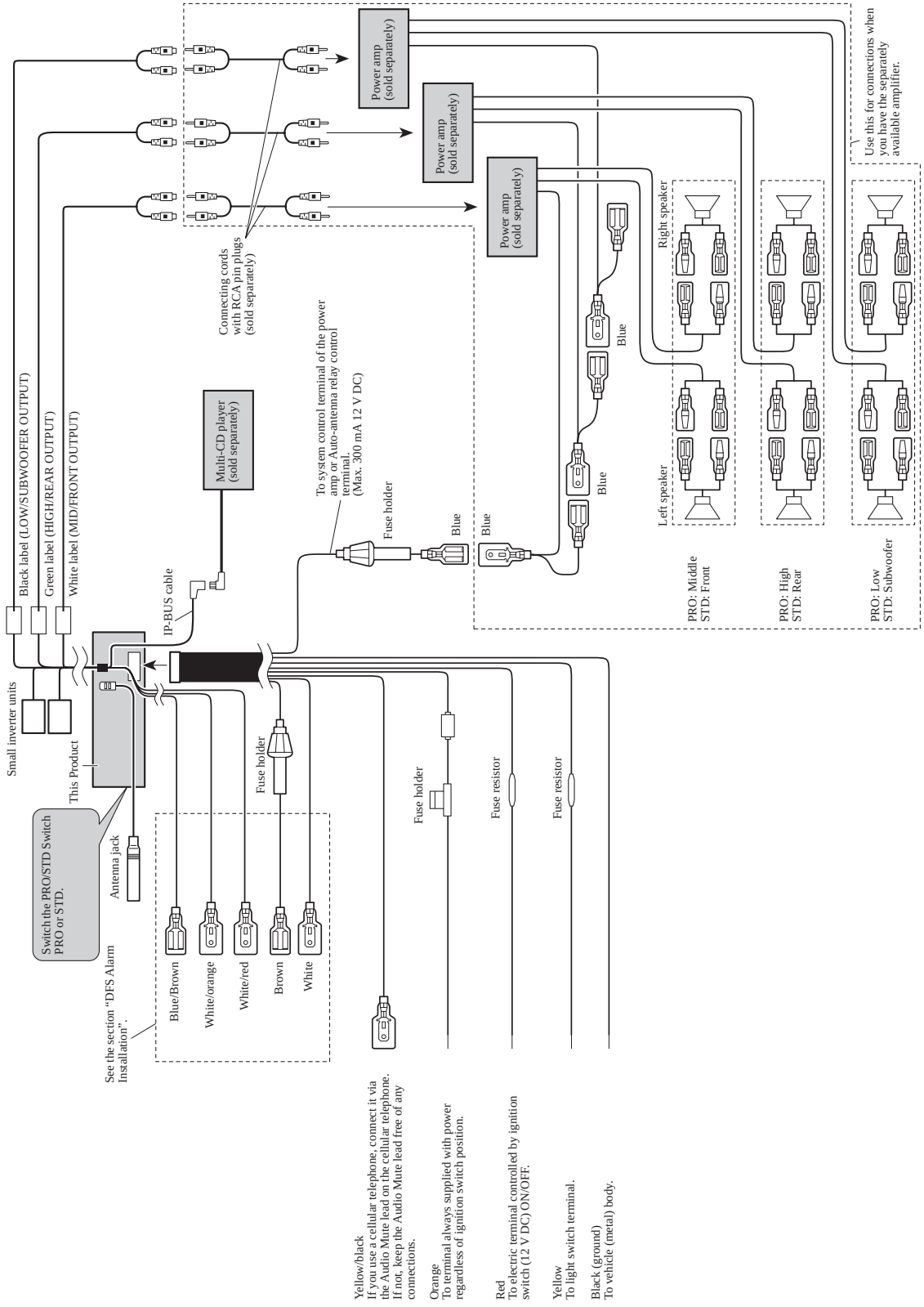



F DSP UNIT
H HIGH OUT PCB
E D/D CONVERTER PCB
G D/D CONVERTER UNIT
C KEYBOARD PCB
CN3001
SWITCH
IC3141 BU4066BCFV
IC3142 TC7S08FU
IC3101 AK7712AVT
IC3201 PE2001AF
IC3301 PM0017AM
ELECTRONIC VOLUME
IC3102 TC9331F
IC3103 M5M51016BTP
S-RAM
DSP SYSTEM CONTROL IC3001 PD5445C
X3102 32.00MHz
X3001 10.00MHz
CN231
CN252
CN251
CN4153
CN4151
CN4152
IC4151 NJM4580
IC4251 NJM4580
IC4351 NJM4580
FRONT Lch OUT
REAR Lch OUT
SUB.W Lch OUT
SYS+B
MI8V
5V REGULATOR
IC871 NJM78M05A
Q871 DSP POWER SWITCH
RESET
IC971 S-80730ANDYI
Q602 BUZZER DRIVE
SP601 ALARM BUZZER
TUNER / AUDIO POWER SUPPLY
IC941 PA2024A
CN901
BACK UP
Q952 A / B SENSE
ACC
B.REMOTE
ALARM
DOOR SW
ILL
MUTE
STARTER CUT
CN681
ALARM SENSOR
DOOR LOCK
STARTER CUT
IC681 TPD1018F
Q911 5V REGULATOR
Q913
IL801
FU801
CN804
CN803
INVERTER ASSY
LCD DRIVE
IC1903 SED1540F0A
IC1904 SED1526F0A
IC1905 SED1526F0A
LCD CONTROL IC1902 PD6237C
LCD1901
EL1901

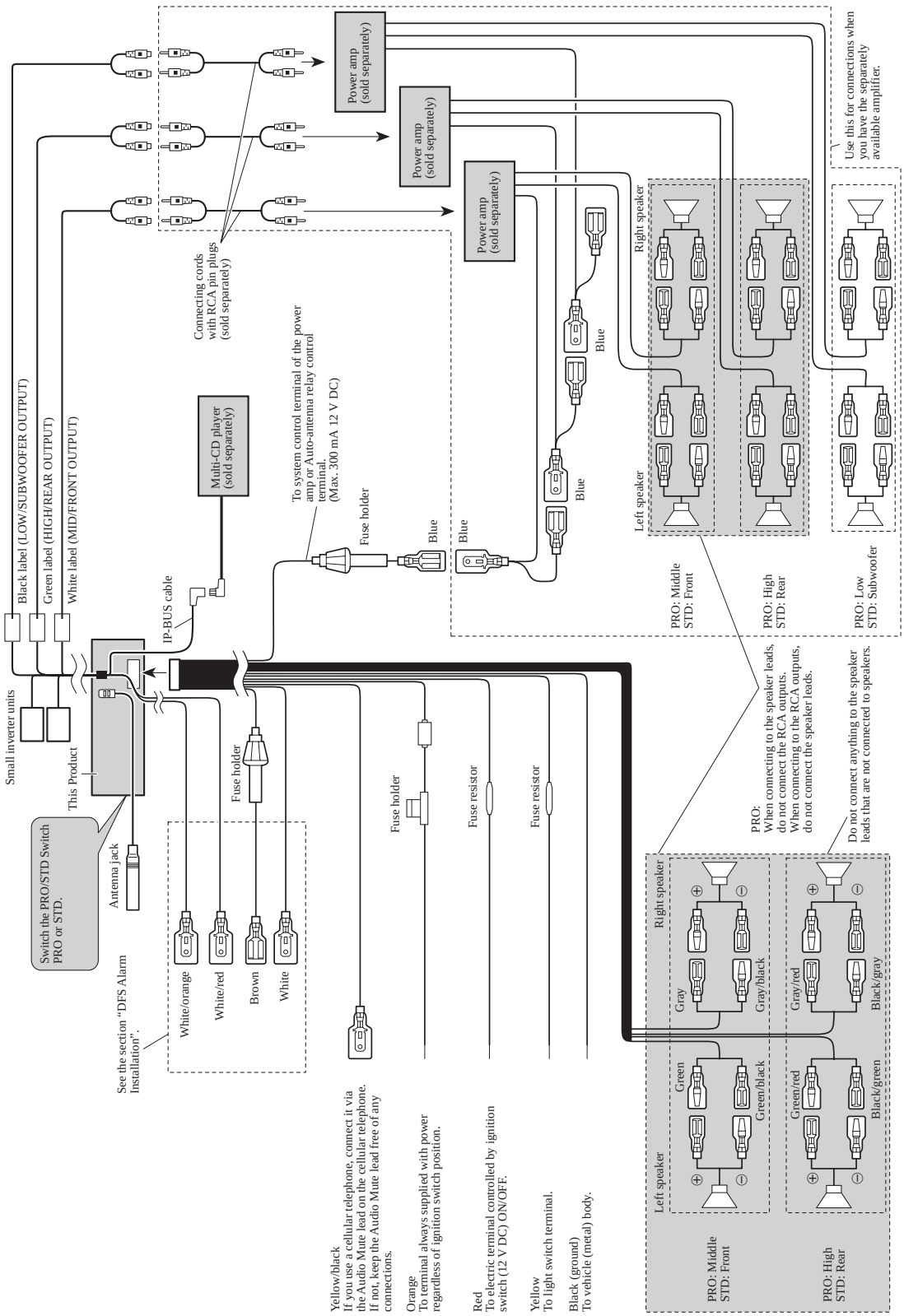
8. OPERATIONS AND SPECIFICATIONS

8.1 OPERATIONS

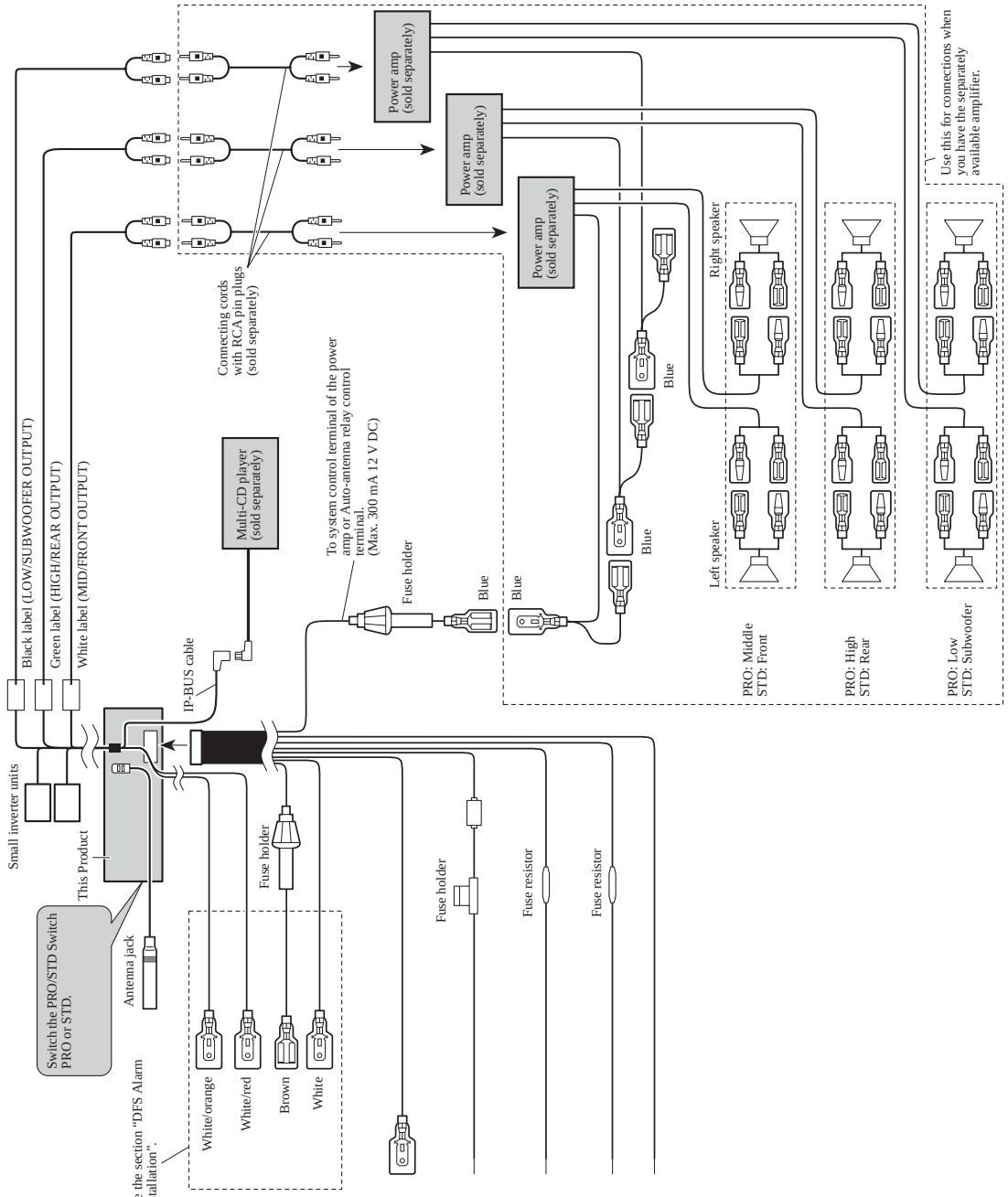
● **Connection Diagram (DEX-P1R/UC)**



● Connection Diagram (DEH-P946/ES)

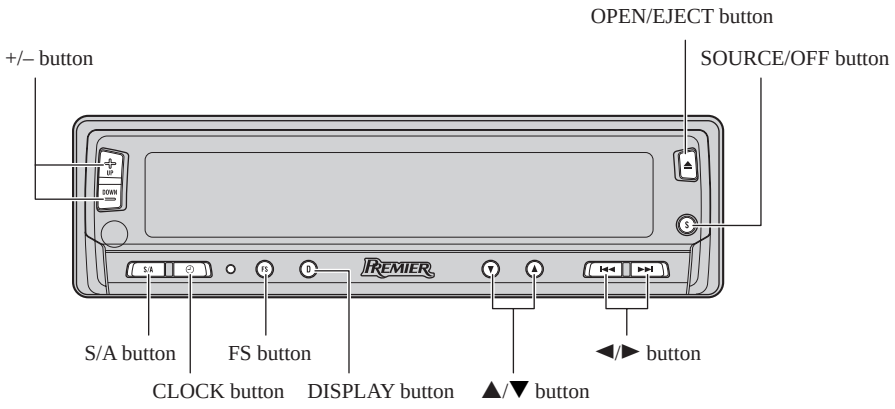


● Connection Diagram (DEX-P1/ES)

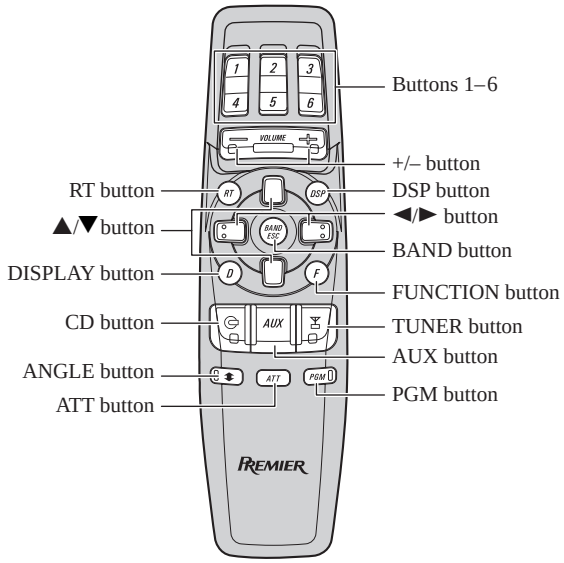


Key Finder

Head Unit



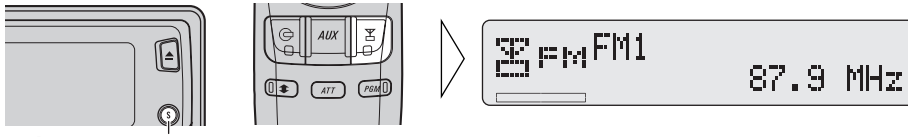
Remote Controller



Tuner Operation

Basic Operation of Tuner

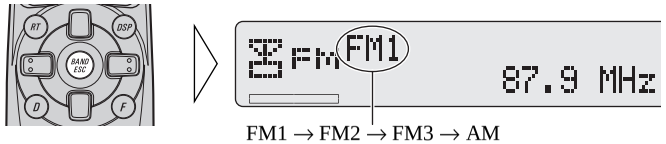
1. Select Tuner.



Each press
changes the Source ...

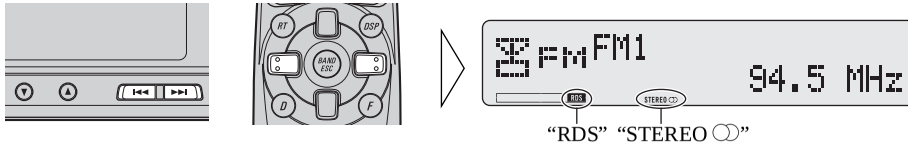
The program service name or frequency appears on the display.

2. Select the desired band.



FM1 → FM2 → FM3 → AM

3. Tune the receiver to a higher or lower frequency.



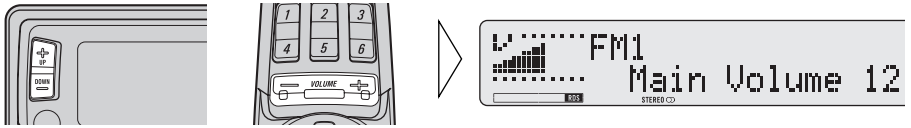
"RDS" "STEREO ◯◯"

This product's tuner lets you select the tuning by changing the length of the time you press the button.

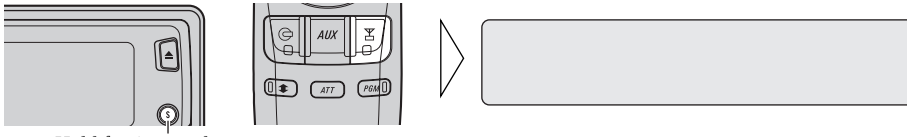
Manual Tuning (step by step)	0.3 seconds or less
Seek Tuning (automatically)	0.3–2 seconds
Manual Tuning (continuously)	2 seconds or more

Note:
- "STEREO ◯◯" indicator lights when a stereo station is selected.
- To select a weak broadcasting station that cannot be tuned in with the Seek Tuning function, tune in with Manual Tuning.
- "RDS" indicator lights when a RDS station is received.

4. Raise or lower the volume.



5. Turn the source OFF.



Hold for 1 second

Entering the Function Menu

In this menu you can select tuner functions.

- **Select the desired mode in the Function Menu.**

Each press
changes the Mode ...

Each press of the FUNCTION button selects the mode in the following order:

FormatScan → FRMT-BSM → APF → Multi ST* → Local → TA** → SeekSelect

* You can select the "Multi ST" mode, only when a multi-station is received.
**During AM reception, you cannot switch to the TA mode.

To cancel the Function Menu, press the BAND button.

Note:
- Modes other than the Local mode are for RDS/ID LOGIC functions. Refer to "Using RDS/ID LOGIC" for details and instructions on how to use these functions.
- After entering the Function Menu, if you do not perform an operation within about 30 seconds, the Function Menu is automatically canceled.

This product features a tuner with RDS and ID LOGIC functions.
RDS (Radio broadcast Data System) is a system that transmits broadcast station information together with FM programs.
ID LOGIC is a database of information about AM and FM stations throughout the United States and in some parts of Canada and Mexico.
To enable you to take advantage of this information, this product features a wide range of functions.
You get display of Broadcast Station Call Sign, Program Service Name and Format (Program type), tuning to stations broadcasting a desired format, automatic tuning to traffic information and emergency broadcasts, and radio text display.

Note:
- The RDS service does not provide AM broadcast information.
- The RDS service may not be provided by all FM stations.
- Sections 1 and 2 provide explanations concerning menus for RDS/ID LOGIC operations. Sections 3 to 10 explain basic operations, and Sections 11 to 14 deal with special functions.
- Before using RDS/ID LOGIC functions, you must first perform Location Set-up.

1. Entering the Function Menu

In this menu you can select RDS/ID LOGIC functions.

- **Select the desired mode in the Function Menu.**

Each press
changes the Mode ...

Each press of the FUNCTION button selects the mode in the following order:
Format Scan → FRMT-BSM → APF → Multi ST* → Local** → TA → Seek Select

* You can select the “Multi ST” mode, only when a multi-station is received.
**LOCAL is a normal tuner function.

To cancel the Function Menu, press the BAND button.

Note:
- After entering the Function Menu, if you do not perform an operation within about 30 seconds, the Function Menu is automatically canceled.

2. Entering the Detailed Setting Menu

In this menu you can perform Location Set-Up, Update and PGM button settings.

- **Enter the Detailed Setting Menu.**

Hold for 2 seconds

Each press of the FUNCTION button selects the mode in the following order:
Location → SET APF → Relocation → Update → PGM-key

To cancel the Detailed Setting Menu, press the BAND button.

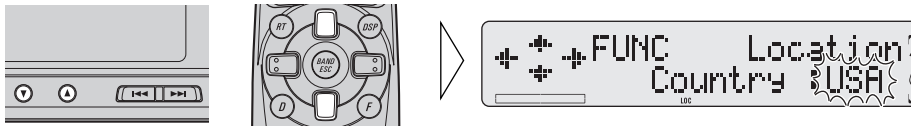
Note:
- You can cancel the Detailed Setting Menu by pressing the FUNCTION button again for 2 seconds or more.

3. Location Set-Up

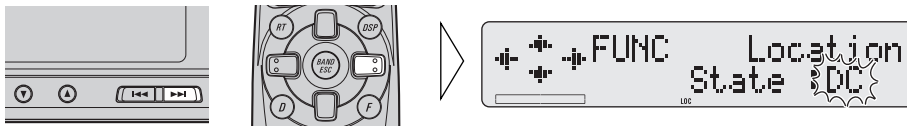
Set the name of the country, state and city (nearest city to the vehicle position) that the vehicle is positioned in.

1. **During FM reception, select the Location Set-Up mode (Location) from the Detailed Setting Menu.**

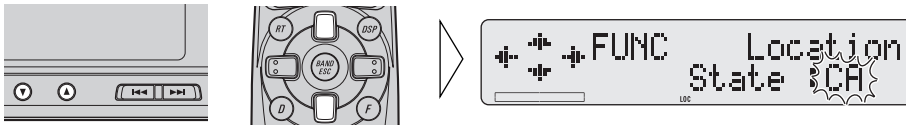
2. **Select the country.**



3. **Advance to next selection.**

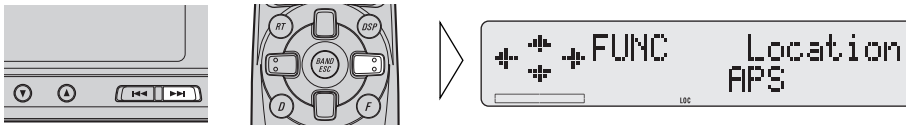


4. Select the state.

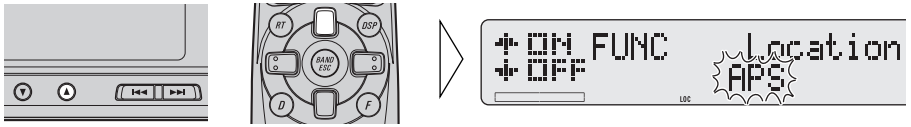


States are stored alphabetically.

5. Advance to next selection.



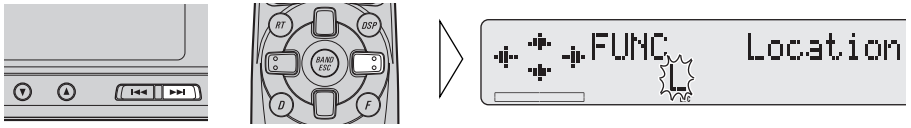
6. Using the APS (Auto Position Setting) function, automatically set the city the vehicle is located in.



When you have completed APS, the city name flashes in the display.

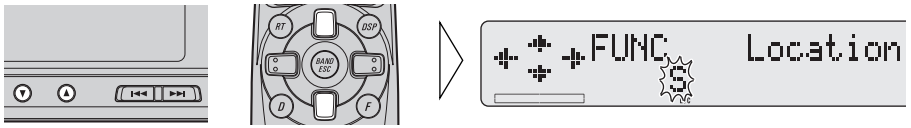
When you have correctly set the city name, perform procedure 10 to cancel the Location Set-Up mode.
If you have not correctly set the city name, perform procedure 7 to set the name manually.

7. Manually set the city.

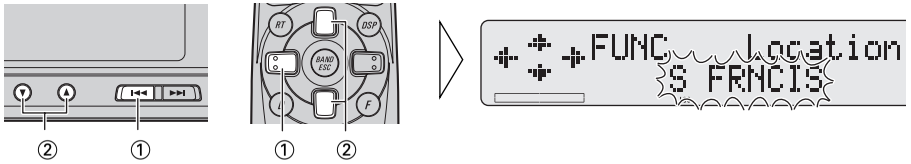


The initial letters of city names are displayed for city name selection.

8. Select the initial of the city name.



9. Select the city.



Cities are stored alphabetically.

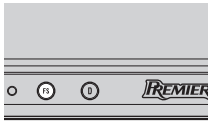
10. When the correct city has been selected, cancel the Location Set-Up mode.

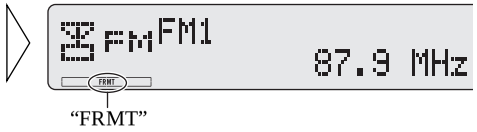
4. Format Tuning

This product allows you to look for a station by format (program type). Formats are divided into 8 types, such as ROCK, COUNTRY, NEWS and TALK.

Group Formats	Corresponding Formats
ROCK	TOP 40
	CLS ROCK
	ROCK
	SFT ROCK
EASY LIS	SOFT
	ADLT HIT
	OLDIES
CLS/JAZZ	CLASSICL
	JAZZ
	NOSTALGA
	PUBLIC
COUNTRY	COUNTRY
R and B	R AND B
	SOFT R/B
INFO	SPORTS
	NEWS
	TALK
	INFORM
	PERSNLTY
RELIGION	REL MUSC
	REL TALK
MISC	LANGUAGE
	MISC

1. Switch to the “Format” station selection mode.





“FRMT”

Each press of the FS button changes the method in the following order:

Format → Frequency

2. Select a group format.

A station broadcasting a program with a different group format from the format of the currently received broadcast station is selected.

Press the ▲ button to select stations with the next group format, and the ▼ button to select stations with the preceding group format.

3. Select a station.

A station broadcasting a program with the same group format as the currently received broadcast station is selected.

Press the ► button to select a station with a higher frequency and the ◄ button to select a station with a lower frequency.

Note:

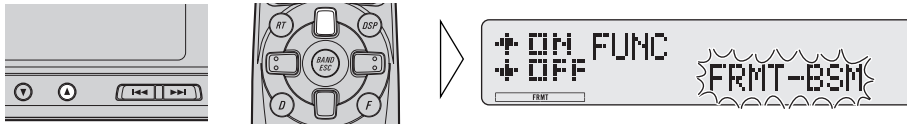
- If you perform operation 3 during reception of a broadcast station with no format data, “NO FORMAT” is displayed.
  The tuner then returns to the prior frequency.
- “NO STATION” is displayed if no station with the selected group format can be received.
  The tuner then returns to the prior frequency.
- If the set vehicle location is different from the current location, the selected group format and the format of the program may differ.
- You can also switch the station selection mode when in the Function Menu Seek Select mode.

5. F. BSM (Format Best Stations Memory)

This function automatically places receivable stations into presets 1–6, in order from strongest to weakest, for a selected group format.

Firstly, choose your desired group format as described in “Format Tuning”.

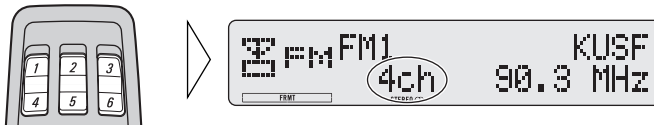
1. **Select the F. BSM mode (FRMT-BSM) in the Function Menu.**
2. **Start F. BSM.**



To cancel F. BSM midway, press the ▼button.

When F. BSM is completed, “FRMT-BSM” in the display stops flashing.

3. **Select a preset station by pressing one of buttons 1–6. (eg. Press button 4.)**

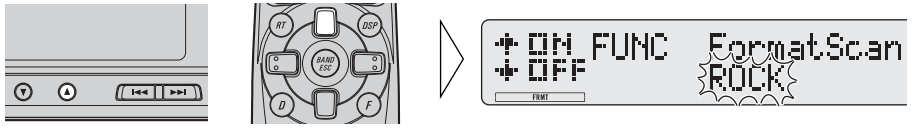


Note:
- In areas where there are not 6 or more stations covered by format tuning, the previously stored contents may be retained.
- If “MS” is displayed, refer to the “11. Multi-Station” section.

6. F. SCAN (Format Scan)

This function allows you to scan receivable stations with the same format type as that of the present station that you are listening to.

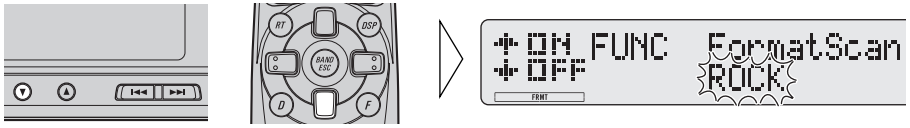
1. **Select the F. SCAN mode (Format Scan) in the Function Menu.**
2. **Start F. SCAN.**



Stations with the same format are tuned one after another at 8 second intervals.

3. **Cancel the scan function enables you to remain tuned to the present station.**

If the Function Menu has been canceled automatically, select the F. SCAN mode in the Function Menu again.

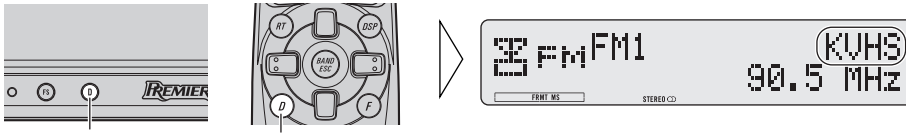


To cancel the Function Menu, press the BAND button.

7. Display Modes

This function can be used to scroll through the various display modes for Call Sign, Program Service Name and Format.

- **Select the desired display mode.**



Each press changes the Display ...

Each press changes the Display ...

Each press of the DISPLAY button changes the display in the following order:

Call Sign (Callsign) → Program Service Name (PS) → Format (Format)

Note:
- You cannot switch to these displays if Call Sign, Program Service Name and Format data for the station you are receiving are not stored in the tuner.
- Program Service Name is RDS service data, so it is not displayed during AM reception.
- If the set vehicle position is different from the current location, a different Format and Call Sign from those of the tuned-in station may be displayed.
- The program of some stations may differ from that indicated by their Format.

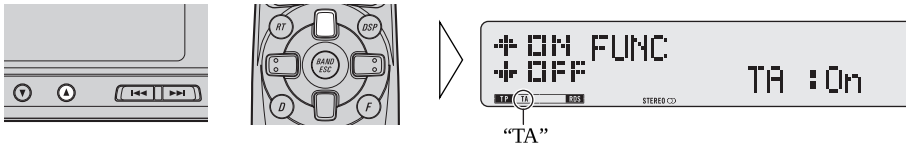
8. TA Function

The TA (Traffic Announcement standby) function lets you receive traffic announcements automatically, no matter what source (tuner, built-in CD player or multi-CD player) you are listening to. The TA function can be activated for a TP station (a station that broadcasts traffic information).

Note:
- The TA function uses RDS service data, so it does not operate during AM reception.

Activating/Deactivating the TA Function

1. **Tune in a TP station.**
   The "TP" indicator lights when the tuner is tuned to a TP station.
2. **Select the TA mode (TA) in the Function Menu.**
3. **Activate the TA function.**



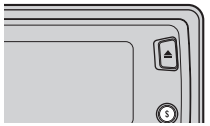
The "TA" indicator lights, indicating that the tuner is waiting for traffic announcements.

Repeat the preceding operation when no traffic announcement is being received to deactivate the TA function.

Note:
- You can also switch the TA Function ON/OFF in the Function Menu.
- The system switches back to the original source following traffic announcement reception.
- The TA function can be activated from the built-in CD player or multi-CD player mode if the tuner was last set to the FM band but not if it was last set to the AM band.
- In the built-in CD player or multi-CD player mode, the tuner automatically seeks out the TP station with the strongest signal in the current area 10 seconds after "TP" disappears from the display. (During seek operation, "TP" flashes.)

Canceling Traffic Announcements

- **Press the SOURCE/OFF button while a traffic announcement is being received to cancel the announcement and return to the original source.**

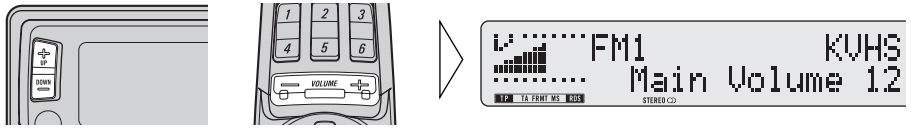


The announcement is canceled but the tuner remains in the TA mode until the TA function is deactivated.

Adjusting the TA Volume

When a traffic announcement begins, the volume adjusts automatically to a preset level to enable you to hear the announcement clearly.

- **Set the volume by adjusting it during reception of a traffic announcement.**



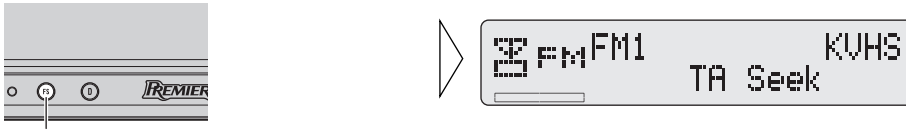
The newly set volume is stored in memory and recalled for subsequent traffic announcements.

Note:
- Volume Attenuator is canceled if a traffic announcement is received in the Volume Attenuator mode.

TA SEEK

TA seek automatically searches for and receives stations currently broadcasting Traffic Announcements.

- **Reception of stations currently broadcasting Traffic Announcements.**



Note:
- If the tuner cannot receive a station currently broadcasting a Traffic Announcement, "NO STATION" is displayed.
  The tuner then returns to the prior frequency.

9. PTY Alarm

The PTY Alarm function automatically lets you hear broadcasts of emergency announcements concerning natural disasters and other emergencies, regardless of the source you are listening to (tuner, built-in CD player or multi-CD player).
You can take advantage of the PTY Alarm function by tuning to an FM RDS station.

1. **Tune in a RDS station.**

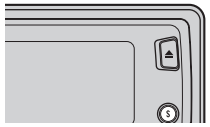
   The “RDS” indicator lights when the tuner is tuned to a RDS station.

2. **If the tuner receives a radio alarm code, “ALARM” is indicated in the display, and the tuner switches to reception of an emergency announcement.**

Note:
- The system switches back to the original source following emergency announcement reception.
- In the built-in CD player or multi-CD player mode, the tuner automatically seeks out the RDS station with the strongest signal in the current area 10 seconds after RDS station reception has become impossible. (This function does not operate when the TA function is active.)

Canceling Emergency Announcements

- **Press the SOURCE/OFF button during emergency announcement reception to cancel the announcement and return to the original source.**



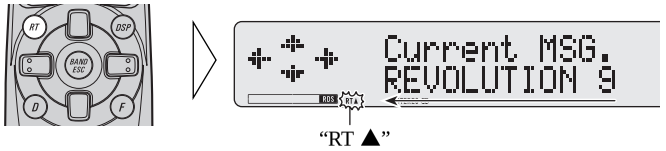
10. Radio Text

This tuner can display Radio Text data transmitted by RDS stations, such as station information, the name of the currently broadcast song and the name of the artist.

Note:
- When Radio Text is received, the “RT ▲” indicator lights.
- The tuner automatically memorizes the three latest Radio Text broadcasts received, replacing text from the least recent reception with new text when it is received.
- You can store data from up to four Radio Text transmissions in buttons 1–4.

Radio Text display

1. **Switch to the Radio Text mode.**



Radio Text data currently being received is automatically scrolled in the display.

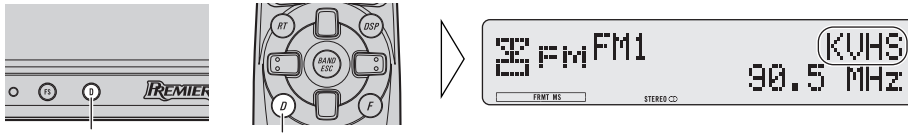
Note:
- Press the RT button once more, and the Radio Text mode is canceled.
- The Radio Text mode is canceled after text data has been scrolled through twice in the display.
- When no Radio Text is currently being received, “NO TEXT” is displayed, and the Radio Text mode is canceled after 5 seconds.

11. Multi-Station

When “MS” is displayed, this indicates there are a number of stations having the same broadcasting frequency stored in the ID Logic database.

For example, if you have performed Format Tuning; you may be listening to a station with a different format type than which you chose.

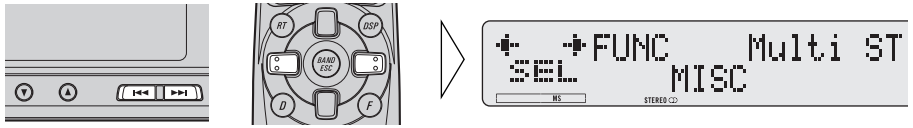
- **Display Call Sign and Format indications, and confirm that Call Sign and Format agree with those of the program being broadcast.**



Note:
- If the format of the program differs from the format you want to listen to, perform Format Tuning, F. BSM or F. SCAN again.
- If the Call Sign and Format do not agree with those of the program, display indications change.

Changing Multi-Station Format

1. **Select the Multi-Station mode (Multi ST) in the Function Menu.**
2. **Select Format.**



Pressing the button switches the Format of the station broadcasting on the frequency currently being received. Select the appropriate Format for the broadcast.

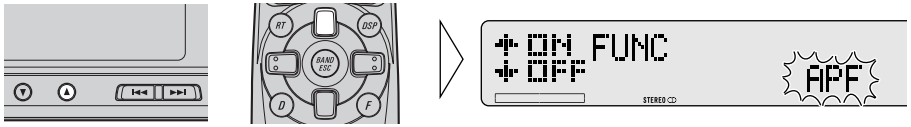
To cancel the Function Menu, press the BAND button.

12. APF (Auto Position Following)

When the source is the tuner

When you drive away from the city vicinity to which the vehicle’s location has been set to, the quality of the received station broadcast will deteriorate. Before searching for a new station, you must first update your vehicle’s position.

1. **Select the APF start mode (APF) in the Function Menu.**
2. **Start APF.**

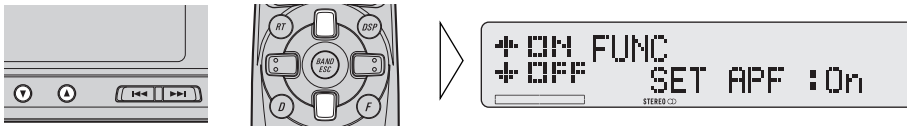


To cancel the Function Menu, press the BAND button.

When the source is a component other than the tuner

Your vehicle’s position can be automatically updated at regular intervals when listening to a source other than tuner eg. CD; if APF has been turned on.

1. **Select the APF ON/OFF mode (SET APF) in the Detailed Setting Menu.**
2. **Switch APF ON or OFF.**

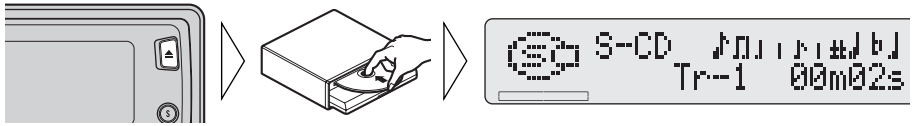


To cancel the Detailed Setting Menu, press the BAND button.

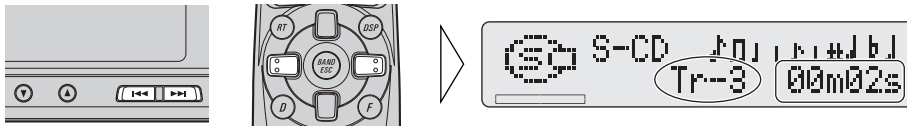
Basic Operation of the Built-in CD Player

The built-in CD player plays one standard 12 cm or 8 cm (single) CD at a time. Do not use an adapter when playing an 8 cm CD.

1. Open the front panel and insert the disc with the label side up.



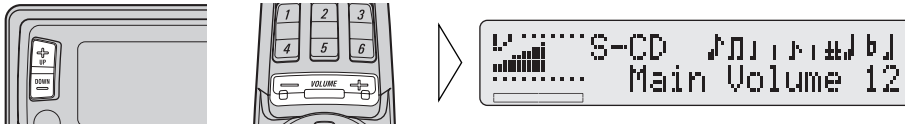
2. Select the desired track (or fast-forward/reverse, per the chart below).



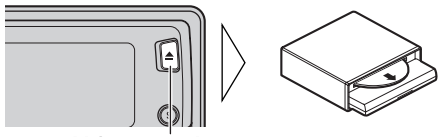
This product's built-in CD player lets you select the Track Search function or Fast-forward/Reverse function by changing the length of time you press the button.

Track Search	0.5 seconds or less
Fast-forward/Reverse	Continue pressing

3. Raise or lower the volume.



4. Remove the disc.



Hold for 2 seconds

Be sure to close the front panel after removing the disc.

Note:
- The CD function can be turned ON/OFF with the disc remaining in this product.
- Discs left partially inserted after ejection may incur damage or fall out.
- If a disc cannot be inserted fully or playback fails, make sure the recorded side is down, hold down the OPEN/EJECT button for 2 seconds or more and check the disc for damage before reinserting it.
- If the built-in CD player cannot operate properly, an error message (such as "ERROR-14") appears on the display.

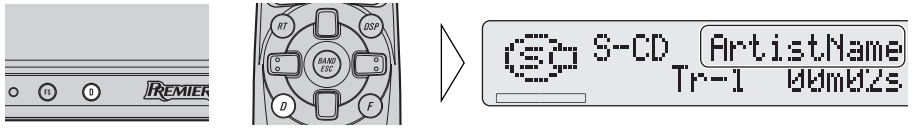
Switching the Display (only for CD TEXT Discs)

You can use this function when playing a CD TEXT disc.

Note:
- A CD TEXT disc is a CD featuring recorded text information such as Disc Title, Artist Name and Track Title.

Selecting the Display

- **Select the desired display.**



Each press of the DISPLAY button changes the display in the following order:

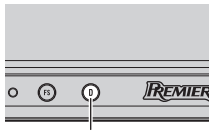
Disc Title → Artist Name → Track Title

Using the Built-in CD Player

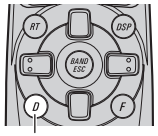
Scrolling the Display

This unit displays the first 10 letters only of Disc Title, Artist Name and Track Title. With text longer than 10 letters, you can see the rest of the text by scrolling.

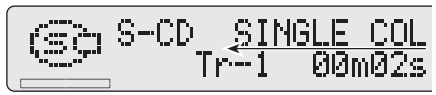
- **Scroll the display.**



Hold for 2 seconds



Hold for 2 seconds

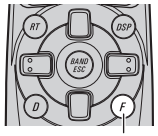


Note:
• You cannot input a disc title with a CD TEXT disc.

Entering the Function Menu

In this menu you can select built-in CD player functions.

- **Select the desired mode in the Function Menu.**



Each press changes the Mode ...

Each press of the FUNCTION button selects the mode in the following order:

Repeat → Random → Scan → Pause → COMP and DBE

To cancel the Function Menu, press the BAND button.

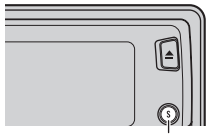
Note:
• After entering the Function Menu, if you do not perform an operation within about 30 seconds, the Function Menu is automatically canceled.

Using Multi-CD Players

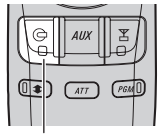
This product can control one or more multi-CD players. (There are some types of Multi-CD players such as the “CDX-P636” which enable connection of a single unit only.)

Basic Operation of Multi-CD Players

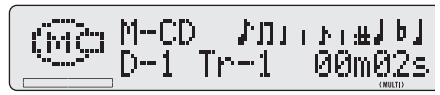
1. **Select the multi-CD player source.**



Each press changes the Source ...

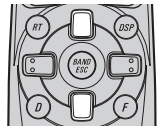


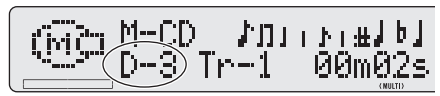
Each press changes the Source ...



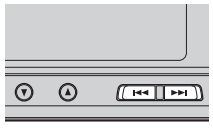
Note:
- The multi-CD player may perform a preparatory operation, such as verifying the presence of a disc or reading disc information, when the power is turned ON or a new disc is selected for playback. “READY” is displayed.
- If the multi-CD player cannot operate properly, an error message such as “ERROR-14” is displayed. Refer to the multi-CD player owner’s manual.
- If there are no discs in the multi-CD player magazine, “NO DISC” is displayed.

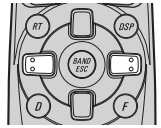
2. **Select the desired disc.**

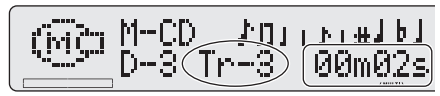




3. **Select the desired track (or fast-forward/reverse, per the chart below).**



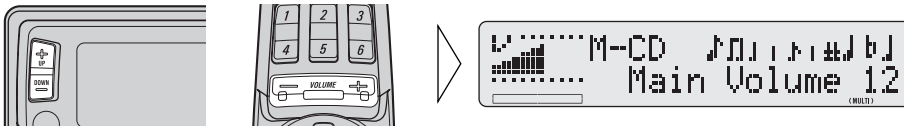




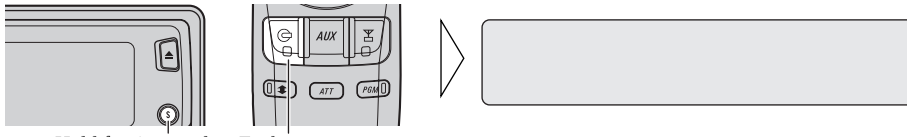
This product lets you select the track search function or fast-forward/reverse function by changing the length of time you press the button.

Track search	0.5 seconds or less
Fast-forward/Reverse	Continue pressing

4. Raise or lower the volume.



5. Turn the source OFF.



Hold for 1 second

Each press changes the Source ...

Playing Discs on a 50-Disc Type Multi-CD Player

When a magazine is loaded into a 50-Disc type multi-CD player, information on all the discs in the magazine is read.

If you start playing a disc on a 50-Disc type multi-CD player before reading of information on all discs has been completed, reading of information stops part way through. This will prevent you from using a number of functions. (If you try and use these functions, “NOT READY” is displayed.)

If this happens, reading of information begins again when you switch to a component other than 50-Disc type multi-CD player.

Switching the Multi-CD Player

It is possible to connect up to three multi-CD players by means of a multiple installation adapter. When two or more multi-CD players are installed, their priorities must be specified. Follow the multi-CD player instructions carefully, and set the address switches properly.

- **Select the multi-CD player you want to use.**

MAGAZINE 1 → MAGAZINE 2 → MAGAZINE 3

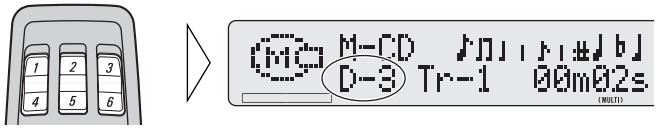
Disc Number Search

Disc Number Search (for 6-Disc 12 -Disc types)

You can select discs directly with the 1–6 buttons. Just press the number corresponding to the disc you want to listen to.

Note:
- When a 12-Disc Multi-CD Player is connected and you want to select disc 7 to 12, press the 1–6 buttons for 2 seconds or longer.

- **Select the desired disc. (e.g. Press button 3.)**



Disc Number Rough Search (for 50-Disc type only)

This handy function lets you select discs loaded in a 50-Disc Multi-CD Player using the 1–5 buttons. The 50 discs are divided into five blocks, with each of the 1–5 buttons assigned to a block.
For example, if you press button 1, discs 10 through 19 are searched in order, and then the disc with the lowest disc number is selected.

Note:
- Pressing button 5 lets you select the 50th disc only.
- Button 6 does not operate.
- Rough search of discs 1 to 9 is not possible. Use the ▲/▼buttons to select a desired disc.
- “NOW LOADING” will be displayed in the following cases:
  * If the disc in the extra tray is selected.
  * If the disc is moved from the extra tray to the magazine. (Refer to the 50-Disc type multi-CD player’s owner’s manual.)

8.2 SPECIFICATIONS

● DEX-P1R/UC

General

Power source ..... 14.4 V DC (10.8 – 15.1 V allowable)
Grounding system ..... Negative type
Max. current consumption ..... 4 A
Dimensions
(DIN) (chassis) ..... 178 (W) × 50 (H) × 155 (D) mm
[7 (W) × 2 (H) × 6-1/8 (D) in]
(nose) ..... 188 (W) × 58 (H) × 20 (D) mm
[7-3/8 (W) × 2-1/4 (H) × 3/4 (D) in]
(D) (chassis) ..... 178 (W) × 50 (H) × 160 (D) mm
[7 (W) × 2 (H) × 6-1/4 (D) in]
(nose) ..... 170 (W) × 46 (H) × 15 (D) mm
[6-3/4 (W) × 1-7/8 (H) × 5/8 (D) in]
Weight ..... 1.8 kg (4.0 lbs)

Preout

Maximum preout output level ..... 4 V
Preout impedance ..... less than 100 Ω

CD player

System ..... Compact disc audio system
Usable discs ..... Compact disc
Signal format ..... Sampling frquency: 44.1 kHz
Number of quantization bits: 16; linear
Frequency characteristics ..... 5 – 20,000 Hz
Signal-to-noise ratio .... 120 dB (1 kHz) (IHF-A network)
Dynamic range ..... 98 dB (1 kHz)
Number of channel ..... 2 (stereo)

FM tuner

Frequency range ..... 87.9 – 107.9 MHz
Usable sensitivity
..... 11 dBf (1.0 µV/75 Ω, mono, S/N: 30 dB)
50 dB quieting sensitivity .... 16 dBf (1.7 µV/75 Ω, mono)
Signal-to-noise ratio ..... 70 dB (IHF-A network)
Distortion ..... 0.3% (at 65 dBf, 1 kHz, stereo)
Frequency response ..... 30 – 15,000 Hz (±3 dB)
Stereo separation ..... 40 dB (at 65 dBf, 1 kHz)
Selectivity ..... 70 dB (2ACA)
Three-signal intermodulation (desire signal level)
..... 50 dBf (two undesire signal level: 110 dBf)

AM tuner

Frequency range ..... 530 – 1,710 kHz
Usable sensitivity ..... 18 µV (S/N: 20 dB)
Selectivity ..... 50 dB (±10 kHz)

DSP

Equalizer (13 Band Graphic Equalizer)
Frequency ..... 50, 80, 125, 200, 315, 500, 800, 1.25 k, 2 k, 3.15 k, 5 k, 8 k, 12.5 k (Hz)
Level ..... ± 12 dB (2 dB)
Auto Equalizer (STD Mode)
(Front and Rear and Subwoofer 13 band graphic + Rear 2 band parametric)
Frequency (Front and Rear and Subwoofer)
..... 50, 80, 125, 200, 315, 500, 800, 1.25 k, 2 k, 3.15 k, 5 k, 8 k, 12.5 k (Hz)
Frequency (Rear) ..... 100 Hz – 8 kHz (1/3 oct)
Level ..... +6 — –12 dB (2 dB)
Q Factor (Rear) 1.2, 3.6
Auto Equalizer (PRO Mode)
(13 band graphic)
Frequency ..... 50, 80, 125, 200, 315, 500, 800, 1.25 k, 2 k, 3.15 k, 5 k, 8 k, 12.5 k (Hz)
Level ..... +6 — –12 dB (2 dB)
Network (STD Mode)
Front/Rear ..... HPF frequency: 50, 80, 125, 200 (Hz)
Slope: 0, –6, –12 dB/oct
Level: 0 — –24 dB (1 dB)
Subwoofer (Mono)
..... LPF frequency: 50, 63, 80, 100, 125, 160, 200 (Hz)
Slope: –6, –12, –18 dB/oct
Level: +6 — –24 dB (1 dB)
Phase: Normal/Reverse
Network (PRO Mode)
High ..... HPF frequency: 2 k, 2.5 k, 3.15 k, 4 k, 5 k, 6.3 k, 8 k, 10 k, 12.5 k (Hz)
Slope: –6, –12, –18, –24 dB/oct
Level: +6 — –24 dB (1 dB)
Phase: Normal/Reverse
Mid ..... LPF frequency: 2 k, 2.5 k, 3.15 k, 4 k, 5 k, 6.3 k, 8 k, 10 k, 12.5 k (Hz)
HPF frequency: 40, 50, 63, 80, 100, 125, 160, 200, 250 (Hz)
Slope: 0, –6, –12, –18, –24 dB/oct
Level: 0 — –24 dB (1 dB)
Phase: Normal/Reverse
Low (Stereo/Mono)
..... LPF frequency: 40, 50, 63, 80, 100, 125, 160, 200, 250 (Hz)
Slope: –12, –18, –24, –30, –36 dB/oct
Level: +6 — –24 dB (1 dB)
Phase: Normal/Reverse
Time Alignment ..... 0 — 400 cm (2 cm)
0 — 160 inch (0.5 inch)

Note:

- Specifications and the design are subject to possible modification without notice due to improvements.

● DEH-P946/ES, DEX-P1/ES

General

Power source ..... 14.4 V DC (10.8 – 15.1 V allowable)
Grounding system ..... Negative type
Max. current consumption (DEH-P946/ES) ..... 10 A
Max. current consumption (DEX-P1/ES) ..... 4 A
Dimensions
(DIN) (chassis) ..... 178 (W) × 50 (H) × 155 (D) mm
(nose) ..... 188 (W) × 58 (H) × 20 (D) mm
(D) (chassis) ..... 178 (W) × 50 (H) × 160 (D) mm
(nose) ..... 170 (W) × 46 (H) × 15 (D) mm
Weight ..... 1.8 kg

Amplifier (DEH-P946/ES)

Continuous power output is 20 W per channel min. into 4 ohms, both channels driven 50 to 15,000 Hz with no more than 5% THD.
Maximum power output ..... 40 W × 4
Load impedance ..... 4 Ω (4 – 8 Ω allowable)
Preout output level/output impedance ..... 500 mV/1 kΩ

Preout (DEX-P1/ES)

Maximum preout output level ..... 4 V
Preout impedance ..... less than 100 Ω

CD player

System ..... Compact disc audio system
Usable discs ..... Compact disc
Signal format ..... Sampling frquency: 44.1 kHz
Number of quantization bits: 16; linear
Frequency characteristics ..... 5 – 20,000 Hz
Signal-to-noise ratio ..... 112 dB (1 kHz) (IEC-A network) (DEH-P946/ES)
Signal-to-noise ratio .... 120 dB (1 kHz) (IEC-A network) (DEX-P1/ES)
Dynamic range ..... 98 dB (1 kHz)
Number of channel ..... 2 (stereo)

FM tuner

Frequency range ..... 87.5 – 108 MHz
Usable sensitivity
..... 11 dBf (1.0 µV/75 Ω, mono, S/N: 30 dB)
50 dB quieting sensitivity .... 16 dBf (1.7 µV/75 Ω, mono)
Signal-to-noise ratio ..... 70 dB (IEC-A network)
Distortion ..... 0.3% (at 65 dBf, 1 kHz, stereo)
Frequency response ..... 30 – 15,000 Hz (±3 dB)
Stereo separation ..... 40 dB (at 65 dBf, 1 kHz)

AM tuner

Frequency range ..... 531 – 1,602 kHz (9 kHz)
530 – 1,710 kHz (10 kHz)
Usable sensitivity ..... 18 µV (S/N: 20 dB)
Selectivity ..... 50 dB (±9 kHz)
50 dB (±10 kHz)

DSP

Equalizer (13 Band Graphic Equalizer)
Frequency ..... 50, 80, 125, 200, 315, 500, 800, 1.25 k, 2 k, 3.15 k, 5 k, 8 k, 12.5 k (Hz)
Level ..... ± 12 dB (2 dB)
Auto Equalizer (STD Mode)
(Front and Rear and Subwoofer 13 band graphic + Rear 2 band parametric)
Frequency (Front and Rear and Subwoofer)
..... 50, 80, 125, 200, 315, 500, 800, 1.25 k, 2 k, 3.15 k, 5 k, 8 k, 12.5 k (Hz)
Frequency (Rear) ..... 100 Hz – 8 kHz (1/3 oct)
Level ..... +6 — –12 dB (2 dB)
Q Factor (Rear) 1.2, 3.6
Auto Equalizer (PRO Mode)
(13 band graphic)
Frequency ..... 50, 80, 125, 200, 315, 500, 800, 1.25 k, 2 k, 3.15 k, 5 k, 8 k, 12.5 k (Hz)
Level ..... +6 — –12 dB (2 dB)
Network (STD Mode)
Front/Rear ..... HPF frequency: 50, 80, 125, 200 (Hz)
Slope: 0, –6, –12 dB/oct
Level: 0 — –24 dB (1 dB)
Subwoofer (Mono)
..... LPF frequency: 50, 63, 80, 100, 125, 160, 200 (Hz)
Slope: –6, –12, –18 dB/oct
Level: +6 — –24 dB (1 dB)
Phase: Normal/Reverse
Network (PRO Mode)
High ..... HPF frequency: 2 k, 2.5 k, 3.15 k, 4 k, 5 k, 6.3 k, 8 k, 10 k, 12.5 k (Hz)
Slope: –6, –12, –18, –24 dB/oct
Level: +6 — –24 dB (1 dB)
Phase: Normal/Reverse
Mid ..... LPF frequency: 2 k, 2.5 k, 3.15 k, 4 k, 5 k, 6.3 k, 8 k, 10 k, 12.5 k (Hz)
HPF frequency: 40, 50, 63, 80, 100, 125, 160, 200, 250 (Hz)
Slope: 0, –6, –12, –18, –24 dB/oct
Level: 0 — –24 dB (1 dB)
Phase: Normal/Reverse
Low (Stereo/Mono)
..... LPF frequency: 40, 50, 63, 80, 100, 125, 160, 200, 250 (Hz)
Slope: –12, –18, –24, –30, –36 dB/oct
Level: +6 — –24 dB (1 dB)
Phase: Normal/Reverse
Time Alignment ..... 0 — 400 cm (2 cm)
0 — 160 inch (0.5 inch)

Note:

- Specifications and the design are subject to possible modification without notice due to improvements.